

# **ADAMJEE COACHING CENTRE**

## **Preparation Paper 2017-2018**

BIOLOGY - IX

## SOME TIPS FOR THE STUDENTS TO STUDY OR FOR PREPARATION OF BIOLOGY PAPER

- \* IX class Biology is one of the most important subject as it is the first step for the aspirants towards their field.
  - \* Biology is a theoretical subject and needs good memorizing skills.
  - \* Read multiple times as you may not remember the terms.
  - \* Biology subjects terms and names are not easy to remember and it takes a lot of practice.
  - \* Use flow charts to remember the processes and sequences.
  - \* Read previous year paper to find out the more important questions and focus more on more important question .
  - \* Try to make your own answers.

## CHAPTER # 01

## **SHORT TOPICS:**



## **DEFINITIONS:**

- (i) Observation      (ii) Hypothesis      (iii) Theory

### **(3) OBSERVATION DIFFERENCES.**

- #### Differences:

CHAPTER # 02

## **SHORT TOPICS:**

- Q.1. Note on cell wall.
  - Q.2. Chromosome and number of chromosomes in different organism cell.
  - Q.3. Salient feature of cell theory.
  - Q.4. Portal system. Names of its types
  - Q.5. Simple tissue and complex tissue with examples
  - Q.6. Functions of root, stem and leaves
  - Q.7. Names of arteries of arterial system of frog.
  - Q.8. Types of respiration in frog.
  - Q.9. Conducting tissues.
  - Q.10. Types of plastids.
  - Q.11. All organelles functions.

## DISCRETE TOPICS:

- QUESTION FIVE (NOTES)**

Q.1. Tissue. Describe animal tissues in detail with the help of labeled diagram.  
Q.2. Tissue. Describe plant tissues in detail.  
Q.3. Mitosis. Names of its phases and significance.  
Q.4. Parts of Brassica flower. Functions of each part. Diagram of stamen and carpel.

**DIFFERENCES:**

- |                                     |                               |
|-------------------------------------|-------------------------------|
| (i) Prokaryotic and Eukaryotic      | (ii) Arteries and veins       |
| (iii) Light and Electron Microscope | (iv) Androecium and Gynoecium |

**DEFINITIONS:**

- |                 |                |               |               |
|-----------------|----------------|---------------|---------------|
| (i) Hibernation | (ii) Digestion | (iii) Nucleus | (iv) Plastids |
|-----------------|----------------|---------------|---------------|

**DIAGRAMS:**

- |                                   |                              |
|-----------------------------------|------------------------------|
| (i) Ventral view of heart of frog | (ii) stem of male frog       |
| (iii) L.S of flower of brassica   | (iv) Arterial system of frog |
| (v) Digestive system of frog      |                              |

**CHAPTER # 03****SHORT TOPICS:**

- Q.1. Scientific name and classification of Man and Frog.  
 Q.2. Binomial nomenclature.  
 Q.3. Five kingdom classification of Whitaker , Margulis and Schwartz  
 Q.4. Units of classification with definitions.  
 Q.5. Basis of classification.

**DEFINITIONS:**

- |              |            |             |              |
|--------------|------------|-------------|--------------|
| (i) Taxonomy | (ii) Order | (iii) Genus | (iv) Species |
|--------------|------------|-------------|--------------|

**CHAPTER # 04****SHORT TOPICS:**

- Q.1. Types of bacteria according to their shapes.  
 Q.2. Characters of Cyanobacteria  
 Q.3. Importance of bacteria.  
 Q.4. Respiration in bacteria.

**DISCRITIVE TOPICS:**

- Q.1. Define Virus. Characteristics of virus. Name of viral disease.

**DIAGRAMS:**

- |                          |                    |
|--------------------------|--------------------|
| (i) Rod shaped bacterium | (ii) Bacteriophage |
|--------------------------|--------------------|

**CHAPTER # 05****SHORT TOPICS:**

- Q.1. Importance of fungi and algae  
 Q.2. Properties of Chlamydomonas  
 Q.3. Note on Agaricus

**DEFINITIONS:**

- |              |             |                |
|--------------|-------------|----------------|
| (i) Mycelium | (ii) Hyphae | (iii) Pyrenoid |
|--------------|-------------|----------------|

**DIAGRAMS:**

- |                   |
|-------------------|
| (i) Chlamydomonas |
|-------------------|

**CHAPTER # 06****SHORT TOPICS:**

- Q.1. Characters of angiosperm and gymnosperm.  
 Q.2. Classification of bryophytes.

**DISCRITIVE TOPICS:**

- Q.1. Importance of vascular plants.

**DIFERENCE:**

- |                       |                                |
|-----------------------|--------------------------------|
| (i) Monocot and dicot | (ii) Angiosperm and gymnosperm |
|-----------------------|--------------------------------|

**DIAGRAMS:**

- |                    |              |
|--------------------|--------------|
| (i) Adiantum plant | (ii) Funaria |
|--------------------|--------------|

**CHAPTER # 07****SHORT TOPICS:**

- Q.1. Characters of phylum Annelids, Echinodermata Arthropod.  
 Q.2. Metamorphosis and its types.  
 Q.3. Define Parasites. List of parasites with their phylum.  
 Q.4. Note on insects and hydra

**CHAPTER # 08****SHORT TOPICS:**

- Q.1. Characters of class reptilian and Aves.  
 Q.2. Names of groups of class mammalian with examples.

**DISCRITIVE TOPICS:**

- Q.1. Fauna and flora of Pakistan.

**DEFINITIONS:**

- |                              |                  |
|------------------------------|------------------|
| (i) Fangs                    | (ii) Operculum   |
| (iii) Cold and warm blooded. | (iv) Hibernation |

**CHAPTER # 09****SHORT TOPICS:**

- Q.1. Note on insectivores plants.  
 Q.2. Photosynthesis with chemical equation.  
 Q.3. Note on heterotrophic plants.  
 Q.4. Note on vitamins.  
 Q.5. Health problems related to nutrition.  
 Q.6. Dental formula.  
 Q.7. Causes of tooth decay.  
 Q.8. Names of enzymes present in pancreatic juice.

**DISCRITIVE TOPICS:**

- Q.1. Experiment to prove that light and chlorophyll is necessary for photosynthesis. With diagram.  
 Q.2. Experiment to prove that O<sub>2</sub> is evolved during photosynthesis with diagram.  
 Q.3. Write different types of teeth in man with their functions.  
 Q.4. Disorders of gut.

**DEFINITIONS:**

- |   |                  |                    |                  |
|---|------------------|--------------------|------------------|
| (i) Parasites                           | (ii) Saprophytes | (iii) Insectivores | (iv) Carnivores. |
| (v) Herbivores                          | (vi) Enzymes     | (vii) Appendicitis |                  |
| (viii) Light reaction and Dark reaction |                  |                    |                  |

**DIAGRAMS:**

- (i) Structure of tooth.      (ii) Pitcher plant.

**CHAPTER # 10****SHORT TOPICS:**

- Q.1. Note on bronchitis.  
 Q.2. Ventilation and two types of process.  
 Q.3. Components of cigarette and their harmful effects on human health.

**DISCRITIVE TOPICS:**

- Q.1. Disorders of respiratory system.  
 Q.2. Aerobic respiration with equation. Anaerobic respiration with equation in animal an in bacteria.

**DIFFERENCES:**

- (i) Combustion and photosynthesis.  
 (ii) Respiration and combustion.

**DIAGRAMS:**

- (i) Human respiratory organs  
 (ii) Relation between cellular respiration and photosynthesis.

**DEFINITIONS:**

- (i) Book lungs      (ii) Gills

**CHAPTER # 11****SHORT TOPICS:**

- Q.1. Functions of blood.  
Q.2. Importance and advantages of transpiration.  
Q.3. Note on blood group.

**DISCRITIVE TOPICS:**

- Q.1. Components of blood. Describe each components in detail with diagram.

**DIFERENCES:**

- (i) Anaemia and haemophilia

**DEFINITIONS:**

- |                   |                   |                 |
|-------------------|-------------------|-----------------|
| (i) Transpiration | (ii) Osmosis      | (iii) Diffusion |
| (iv) Rh factor    | (v) Heart attack. |                 |

**CHAPTER # 12****SHORT TOPICS:**

- Q.1. Role of skin in excretion.  
Q.2. Kidney problem.  
Q.3. Note on kidney transplant.

**DEFINITIONS:**

- |           |             |            |                    |
|-----------|-------------|------------|--------------------|
| (i) Latex | (ii) Resins | (iii) Gums | (iv) De -amination |
|-----------|-------------|------------|--------------------|

**DIAGRAM:**

- (i) L.S of human kidney.

**CHAPTER # 13****SHORT TOPICS:**

- Q.1. Types of movement in plants.  
Q.2. Joints and defects of skeletal system.  
Q.3. Function of skeleton in man.  
Q.4. Locomotion in protocists.  
Q.5. Muscles and its types.

**DEFINITIONS:**

- |                   |                           |                       |
|-------------------|---------------------------|-----------------------|
| (i) Heart wood    | (ii) Sessile organism     | (iii) Motile organism |
| (iv) Osteoporosis | (v) Dislocation of joints |                       |

**DIFERENCES:**

- (i) Exoskeleton & Endoskeleton.      (ii) Axial & Appendicular Skeleton.

**CHAPTER # 14****SHORT TOPICS:**

- Q.1. Names of endocrine glands and their hormones.  
Q.2. Receptor and names of receptor organs of sight, sound, odour and taste.  
Q.3. Defects of eye.  
Q.4. Reflex action.  
Q.5. Nervous disorder.

**DISCRITIVE TOPICS:**

- Q.1. Neurons. Structure of neuron in detail with diagram.  
Q.2. Hormones. Important plant hormones with specific function.

**CHAPTER # 15****SHORT TOPICS:**

- Q.1. Germination and its two types.  
Q.2. Pollination with its types.  
Q.3. Advantages of vegetative propagation.

**DISCRITIVE TOPICS:**

- Q.1. Dispersal of seed and fruits. Different methods of dispersal.  
 Q.2. Asexual reproduction in plants. Methods of asexual reproduction.

**DEFINITIONS:**

- (i) Binary fission      (ii) Multiple fission      (iii) Clonning      (iv) Fertilization

**DIFFERENCES:**

- (i) Sexual reproduction & Asexual reproduction

**CHAPTER # 16****SHORT TOPICS:**

- Q.1. Mendel's law of dominance, segregation and independent assortment.  
 Q.2. Disorders of sex linked  
 Q.3. Hereditary disease  
 Q.4. Brief structure of DNA.

**DEFINITIONS:**

- (i) Alleles      (ii) Homozygous      (iii) Gene  
 (iv) Dominant character      (v) Transgenic plant

**DIFFERENCES:**

- (i) Genotype & Phenotype      (ii) DNA & RNA

**CHAPTER # 17****SHORT TOPICS:**

- Q.1. Variation and its causes.

**DISCRITIVE TOPICS:**

- Q.1. Darwin theory of evolution. Important points of its theory.  
 Q.2. Lamark's theory of evolution.

**DEFINITIONS:**

- (i) Homologous organ      (ii) Analogous organ      (iii) Vestigial organ.

**CHAPTER # 18****SHORT TOPICS:**

- Q.1. Pollution. Names of pollutants.

**DISCRITIVE TOPICS:**

- Q.1. Ecosystem. Components of ecosystem.

**DEFINITIONS:**

- (i) Population      (ii) Community      (iii) Food web      (iv) Food chain  
 (v) Pyramid of energy      (vi) Producers      (vii) Consumer      (viii) Decomposer

**DIFERENCE:**

- (i) Population & community

**CHAPTER # 19****SHORT TOPICS:**

- Q.1. Contribution of biology in various aspects of human.  
 Q.2. Biotechnology. Uses of bacteria and fungi.  
 Q.3. Antibiotics and its importance.

**DEFINITIONS:**

- (i) Cholera      (ii) Apiculture      (iii) Sericulture

# ADAMJEE COACHING CENTRE

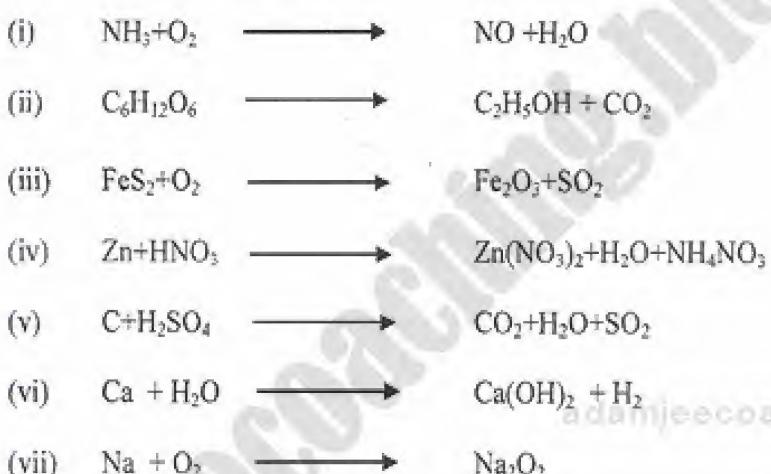
## Preparation Paper 2017-2018

**CHEMISTRY – IX****CHAPTER # 01 (Introduction to Chemistry)**

- Q.1. Define chemistry and write the names of its branches.  
 Q.2. Write the name of any three Muslim scientist and write one contribution each.  
 Q.3. Important role of Chemistry in our society.  
 Q.4. Write three significant reasons to study chemistry.  
 Q.5. What is a scientific method? Describe its four stages.

**CHAPTER # 02 (Chemical Combinations)**

- Q.1. Define: (i) Atomic Mass (ii) Molar Mass  
                   (iii) Avogadro's Number (iv) Molecular formula (v) Empirical Formula  
 Q.2. State: (i) Law of Constant Composition (ii) Law of Multiple Proportions  
 Q.3. Describe Landolt's experiment for verification of Law of Conservation Mass.  
 Q.4. What is a chemical reaction? Explain the following types of chemical reactions with example:  
     (i) Addition Reaction (ii) Decomposition Reaction (iii) Combustion Reaction  
 Q.5. Balance the following equation.



Do practice of numericals related to mole and avagadro's number.

**CHAPTER # 03 (Atomic Structure)**

- Q.1. Write four points of Dalton's Atomic Theory.  
 Q.2. Describe Rutherford's Experiment which led him to the discovery of Nucleus of an Atom.  
 Q.3. Define Bohr's Atomic Model.  
 Q.4. Draw a label diagram to show the separation of Alpha , Beta and Gamma rays and also write two properties of each.  
 Q.5. Define: (i) Atomic Number (ii) Mass Number (iii) Isotopes (iv) Radioactivity  
 Q.6. Write three properties of Cathode Rays.  
 Q.7. Find the number of electron, proton and neutron in:  
     (i)  $^{16}_8\text{O}$    (ii)  $^{11}_{23}\text{Na}^{-1}$

**CHAPTER # 04 (Periodicity of Elements)**

- Q.1. What are Halogens? Write their names and three properties.  
 Q.2. Write the names of Alkali Metals and write their three properties.  
 Q.3. State Mendeleev's Periodic Law and writes its three salient features and two advantages and two defects.  
 Q.4. State (i) Newland's Octave Law (ii) Dobereiner Triad (iii) Modern Periodic Law.  
 Q.5. What are the Transition Elements? Write their four general properties.  
 Q.6. Define (i) Electronegativity (ii) Electron Affinity (iii) Atomic Radius (iv) Ionization Energy

**CHAPTER # 05 (Chemical Bonding)**

- Q.1. Define Covalent Bond and write its three types with one example for each.
- Q.2. What is Co – ordinate Covalent Bond? How is a co – ordinate covalent bond formed between  $\text{NH}_3$  and  $\text{H}^+$  ion and  $\text{NH}_3$  and  $\text{HCl}$ ? Explain.
- Q.3. Write four properties of ionic and covalent compound.
- Q.4. Define: (i) Metallic Bond      (ii) Dispersion Forces    (iii) Hydrogen Bonding  
                                         (iv) Polar and nonpolar covalent bond

**CHAPTER # 06 (States of Matter)**

- Q.1. Define: (i) Fusion      (ii) Vaporization      (iii) Melting Point  
                                         (iv) Boiling Point      (v) Evaporation      (vi) Brownian movement
- Q.2. Describe the Kinetic Molecular Theory of Matter.
- Q.3. State the Graham's Law.

**CHAPTER # 07 (Solution and Suspension)**

- Q.1. Define Solubility. Write the names of its factors and describe them.
- Q.2. Define: (i) Mole Fraction      (ii) Molality      (iii) Crystallization  
                                         (iv) Saturated, Unsaturated and Super Saturated Solution
- Q.3. Write four differences between Solution and Suspension.
- \* Do practice of numericals related to molarity and mole fractions.

**CHAPTER # 08 (Electrochemistry)**

- Q.1. Define Electroplating and describe the process of Nickel / Chromium Plating.
- Q.2. Explain the construction and working of Dry Cell and Daniel Cell.
- Q.3. Define Electrolysis and write its three uses.
- Q.4. Define (i) Ampere (ii) Coulombs (iii) Equivalent Mass (iv) Faraday (v) Electrolytes
- \* Do practice of numericals related to Faraday's first law.

**CHAPTER # 09 (Acids, Bases and Salts)**

- Q.1. Write three chemical properties of Acids with balanced equations.
- Q.2. State Bronsted – Lowry Concept of Acids and Bases and explain it with the example of  $\text{HCl}$  and  $\text{H}_2\text{O}$  or  $\text{NH}_3$  and  $\text{H}_2\text{O}$ .
- Q.3. State Lewis Concept of Acids and Bases and explain it with the examples.
- Q.4. Explain by giving balanced equations the Solvay's Process.
- Q.5. Define Salt and writes its three types with examples.
- Q.6. Define: (i) pH      (ii) Polyprotic Acids      (iii) Acidity of Bases  
                                         (iv) Double Salts      (v) Neutralization

**CHAPTER # 10 (Thermo Chemistry)**

- Q.1. Define Endothermic and Exothermic Reactions. Give two examples of each.
- Q.2. Define the Enthalpy of a reaction. How the change in enthalpy is calculated.

**CHAPTER # 11 (Hydrogen and Water)**

- Q.1. Write three uses of Hydrogen gas.
- Q.2. What is soft water and hard water? Describe how hardness of water can be removed by Clark's method.
- Q.3. Write four characteristics of Potable Water.
- Q.4. Define: (i) Water of Crystallization      (ii) Nascent Hydrogen
- Q.5. Write three differences between Heavy Water and Ordinary Water.

**CHAPTER # 12 (Carbon, Silicon and their Compounds)**

- Q.1. What is Allotropy? Write the names of three crystalline and four amorphous forms of Carbon. Also write two characteristics of crystalline form of Carbon.
- Q.2. Write preparation and two uses of Water Glass.
- Q.3. What is silica gel? Give its two uses.
- Q.4. Define: (i) Catenation      (ii) Silicates

**CHAPTER # 13 (Nitrogen and Oxygen)**

- Q.1. What is Aqua Regia? How it dissolved gold?  
 Q.2. Describe by giving chemical equations how Ammonia is manufactured by Haber – Bosch Process?  
 Q.3. Define Ozone. Write its three important uses.  
 Q.4. Define Normal Oxides and describe its types with examples.  
 Q.5. Write four uses of Hydrogen Peroxide.  
 Q.6. How Nitric acid is prepared by Ostwald's process.

**CHAPTER # 14 (Sulphur and Its Compounds)**

- Q.1. How Sulphur is extracted by Frasch Process.  
 Q.2. Define Allotropy. Name the allotropic forms of sulphur and give two properties of each.  
 Q.3. How Sulphuric acid is commercially prepared by Contact Process.  
 Q.4. Write three uses of sulphuric acid.

**CHAPTER # 15 (Halogens)**

- Q.1. Describe Industrial preparation of Chlorine by Nelson's Cell.  
 Q.2. Give the Laboratory preparation of HCl.  
 Q.3. What is Bleaching Powder? Write its three uses.  
 Q.4. Write two uses of (i) Bromine (ii) Iodine (iii) Fluorine  
 Q.5. Write the laboratory preparation of Chlorine gas.

**CHAPTER # 16 (Metals and Non – Metals)**

- Q.1. Describe the Extraction of Iron in Blast furnace.  
 Q.2. Describe the electrolysis of Pure Alumina.  
 Q.3. What are the three common Stainless Steel and their compositions.  
 Q.4. Write the composition and one use of (i) Brass (ii) Bronze (iii) Nichrome

**CHAPTER # 17 (Organic Chemistry)**

- Q.1. Write Laboratory Preparation of (i) Ethyne (ii) Ethene. And write two Physical and three Chemical Properties of each.  
 Q.2. What are Isomers. Write three Isomers of Pentane.  
 Q.3. Define (i) Hydrocarbons (ii) Isomerism (ii) Polymerization (iii) Functional Group  
 Q.4. Describe Substitution Reaction with four equations of  $\text{Cl}_2$  and  $\text{CH}_4$ .

**CHAPTER # 18 (Chemical Industries)**

- Q.1. Write causes of food spoilage and two methods of food preservation.  
 Q.2. Describe Saponification. Write the names of four types of soaps.  
 Q.3. What are Plastics? Write the names of their main groups.  
 Q.4. Write the formulae and one use of (i) Polyethene (ii) Polyvinyl Chloride

**GIVE THE CHEMICAL REACTIONS**

- |   |                     |                    |                     |                    |
|---|---------------------|--------------------|---------------------|--------------------|
| Q.1. Reaction of $\text{H}_2$ with            | (i) Ethene          | (ii) Ca – Metal    | (iii) S             | (iv) $\text{Cl}_2$ |
| Q.2. Reaction of Coke with                    | (i) S               | (ii) Al            | (iii) $\text{ZnO}$  | (iv) Steam         |
| Q.3. Reaction of $\text{HNO}_3$ with          | (i) $\text{CaCO}_3$ | (ii) $\text{NaOH}$ | (iii) Mg            | (iv) S             |
| Q.4. Reaction of $\text{H}_2\text{SO}_4$ with | (i) Al              | (ii) C             | (iii) $\text{NaOH}$ | (iv) S             |

**WRITE DIFFERENCES BETWEEN**

- (i) Molecular Mass and Formula Mass
- (ii) Metal and Non Metal
- (iii) Ionic and Covalent Bond
- (iv) Ionic and Covalent Compounds
- (v) Covalent and Co – ordinate Bond
- (vi) Saturated and Unsaturated Solution
- (vii) Primary and Secondary Cell
- (viii) Heavy and Ordinary Water
- (ix) Diamond and Graphite
- (x) Exo – thermic reactions and Endo – thermic reactions

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

### COMPUTER STUDIES – IX

#### Important Questions for Section “B” (Short-Answer Questions)

- (i) Define Keyboard with its distribution of keys.
- (ii) Define the term hardware and software and why are special and general purpose software prepared?
- (iii) Define Ports and its types.
- (iv) What is memory? Define its types.
- (v) What is scanner? Define its types.
- (vi) Define operating system.
- (vii) Differentiate between:
  - (a) Internal and External Commands of DOS. (b) High Level and low level language.
  - (c) Analogue and Digital Computer. (d) Hard Copy and Soft Copy.
  - (e) Compiler and Interpreter. (f) Serial and Parallel Ports
- (g) DOS and Windows
- (viii) Write down the capabilities and limitations of computer.
- (ix) Define term computer? What is the main-frame computer and where it is used?
- (x) Define data and information.
- (xi) What is number system? Name its types.
- (xii) Describe the properties of Windows operating system and where we find the deleted files and folder in Windows operating system? Also write the steps to move file or folder over there?
- (xiii) Define CD-writer and Disk drive.
- (xiv) Define floppy disk.
- (xv) Write down the full names of the following abbreviations:
  - (a) 4GL (b) RMDIR (c) HD (d) IBM (e) CRT
  - (f) ASCII (g) LCD (h) BASIC (i) DPI (j) COBOL
  - (k) HDD (l) EPROM (m) LAN (n) EDVAC
- (xvi) Define magnetic tape.

(xvii) Construct the truth table according to the following rule.

- (a)  $A + AB = A$       (b)  $(A + B)(A + C) = A + BC$   
 (c)  $\overline{X + Y} = \overline{X} \cdot \overline{Y}$       (d)  $A + \overline{A} \cdot B = A + B$

(xviii) Convert the following numbers to their equivalent numbers in the given bases.

- (a)  $(422)_{10} = ( \quad )_2$       (b)  $(1010010)_2 = ( \quad )_{10}$   
 (c)  $(3AB)_{16} = ( \quad )_{10}$       (d)  $(861)_{10} = ( \quad )_8$   
 (e)  $(110100111011)_2 = ( \quad )_8$

(xix) What are the purpose of Input devices and Output devices in computer system.

(xx) Draw K-map for the following:

- (a)  $AB + \overline{A}B + \overline{AB} + A\overline{B}$   
 (b)  $ABC + \overline{ABC} + A\overline{B}\overline{C} + \overline{ABC}$   
 (c)  $\overline{ABC} + \overline{A}BC + A\overline{B}\overline{C} + ABC$   
 (d)  $\overline{ABCD} + ABCD + \overline{ABCD} + ABC\overline{D} + A\overline{B}CD + \overline{ABC}\overline{D}$

### Important Questions for Section "C"

#### (Detailed-Answer Questions)

- Q.1. (a) Draw the block diagram of CPU and describe its major components.  
 (b) What is language translator? Explain different types of it.
- Q.2. (a) What is Boolean algebra?  
 (b) What is Karnaugh map?
- Q.3. (a) Define monitor and its types.      (b) What is DOS? Define briefly
- Q.4. (a) Define printer and its types.      (b) Define plotter and its types.
- Q.5. (a) Describe the different type of computer according to size.  
 (b) Write short note on any two of the following.  
 (i) Icon      (ii) Taskbar      (iii) My computer  
 (iv) Desk top      (v) My documents  
 (vi) Recycle bin      (vii) Windows Explorer
- Q.6. (a) What do you mean by bus? Write types of bus in detail.  
 (b) Draw generation table.

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

ENGLISH – IX

### Important Questions for Section "B" (Short Answer Question)

**Q.1. Grammar Section:**

- (i) Do as directed:
  - \* Tenses
  - \* Active & Passive Voice
  - \* Direct & Indirect Speech
  - \* Parts of Speech
  - \* Articles

**Note:** Following the rules and structures taught in the class during academic session students can excel in aforementioned topics. Learn all the tenses, voices, narrations as per teacher's method.

**Q.2. (a)**

### PROSE SECTION

#### CHAPTER # 01 (The Last Sermon of the Holy Prophet ﷺ)

- (i) Why did the Quraish turn against the Holy Prophet ﷺ?
- (ii) What are the key points of the last sermon of the Holy Prophet ﷺ?
- (iii) How were the women treated before the advent of Islam?

#### CHAPTER # 02 (Shah Abdul Latif)

- (i) Why did Shah Latif keep sitting on the bank of the lake near the mound?
- (ii) What changes did Latif make in music of his time?
- (iii) What is the message of Latif's poetry? When is Latif's "URS" held? How do people celebrate it?

#### CHAPTER # 03 (Moen-jo-Daro)

- (i) Who was Sir John Marshall? What was his job?
- (ii) What were the professions of people of Moen-jo-Daro? What kind of life did the people of Moen-jo-Daro lead?
- (iii) What probably happened to the people of Moen-jo-Daro?
- (iv) How can we learn more about civilization of Moen-jo-Daro?

#### CHAPTER # 04 (Helen Keller)

- (i) When and where was Helen Keller born? When did she visit Pakistan and why?
- (ii) What was Helen's message to deaf, dumb and blind children?
- (iii) How did Helen learn to speak again?
- (iv) Who was Miss Sullivan? How did she teach Helen?

#### CHAPTER # 05 (Allama Iqbal)

- (i) How did Quaid praise Iqbal's role in a message on his death?
- (ii) What did Allama Iqbal say in his Allahabad presidential address?
- (iii) What lesson did Allama Iqbal learn from the history of Muslims?
- (iv) Why did Allama Iqbal want a separate state for the Muslim of India?

#### CHAPTER # 06 (The Role of Women in Pakistan Movement)

- (i) What was the condition of Muslim women before independence?
- (ii) Who was the first woman to make speech in London's Guild Hall?
- (iii) Who was Bi-Amman? Why is she remembered till today?
- (iv) Describe the role of Begum Rana Liaquat Ali and Begum Mohammad Ali in freedom movement.

**CHAPTER # 07 (Quaid-e-Azam and his vision for Pakistan)**

- (i) What is the greatest achievement of Quaid-e-Azam's life?
- (ii) What message did Quaid-e-Azam deliver on 11<sup>th</sup> August 1947?
- (iii) What did Quaid-e-Azam say about the religious freedom of every citizen?

**CHAPTER # 08 (Health is Wealth)**

- (i) Where do the mosquitoes live? How do we get Malaria and how can we get rid of it?
- (ii) How do flies and dust carry germs to our food and how do they make us ill? How are diseases caused?

**CHAPTER # 09 (The Great War Hero)**

- (i) What lesson do we learn from the Martyrdom of Major Aziz Bhatti?
- (ii) What was major Aziz Bhatti's reply to his commanding officer?
- (iii) When and where did Aziz Bhatti fight? Why did he keep himself on an elevated position?

**CHAPTER # 10 (Nursing)**

- (i) What does "Nursing" means? Who was Florence Nightingale?
- (ii) Where did Holy Prophet ﷺ establish a hospital and who was designated incharge of it?
- (iii) Who was Hazrat Ghifaria? Describe the contribution of Muslims women to nursing?
- (iv) Who was the founder of modern nursing? Why was Florence Nightingale offered a purse of 4500 pound? What did she do with this money?

**CHAPTER # 11 (Responsibilities of A Good Citizen)**

- (i) What are problems of our country? What measures (steps) are being adopted by government to solve these problems?
- (ii) How important are our neighbours according to Holy Prophet ﷺ?

**CHAPTER # 12 (A letter about the Village Life)**

- (i) Who are the important persons in the village? Who are the two workmen needed most in the village?
- (ii) What is Otaq? What do villagers do at "Otaq"?
- (iii) How important are our neighbours according to Holy Prophet ﷺ?

**CHAPTER # 13 (The Secret of Success)**

- (i) What is the moral of the lesson "The Secret of Success"?
- (ii) What could have happened to the king if he had returned earlier from the saint's hut?
- (iii) What were three questions troubled the King? How did saint answer the three questions?

**CHAPTER # 14 (The Guddu Barrage)**

- (i) What is Barrage? How many canals does Guddu Barrage have? And how much area of Sindh is irrigated by it?
- (ii) Where is Guddu Barrage built? When was it put into operation?
- (iii) What are the benefits of Guddu Barrage?

Q.2. (b)

**POEMS SECTION**

**Note:** Students are required to attempt any FOUR questions in Board Exams.

**POEM # 01 (The Neem Tree)**

- (i) How does the poetess compare Neem Tree to man? And why does the poetess say that the "Neem Tree" is unafraid?
- (ii) What according to the poetess is the highest aim of life?
- (iii) What does the neem tree look like?

**POEM # 02 (Daffodils)**

- (i) What are the two moods of poet in the poem Daffodils? Under what conditions does the poet recall the scene?
- (ii) Where did the poet see the host of daffodils? And what did poet feel while looking at the daffodils? Or what wealth did the scene bring to the poet?

**POEM # 03 (Children)**

- (i) Why does the poet call the children the living poem? What would happen if there were no children? And with what does the poet compare the children?
- (ii) How can the birds and sun shine be in the hearts of children?
- (iii) How are the children different from the poet?

**POEM # 04 (Stopping by Woods on a Snowy Evening)**

- (i) Why did the horse think it strange to stop by the woods?
- (ii) Why the poet cannot stay to enjoy the beauty of the woods?

**POEM # 05 (The Miller of the Dee)**

- (i) Who was the happier of the two, the Miller or the King? Why was the Miller thankful to the river Dee?
- (ii) Why did the King Hal envy the Miller?
- (iii) "I thank the river Dee" who is the speaker of these words? Why is he thankful to the river Dee?

**POEM # 06 (Abou Ben Adhem)**

- (i) "Nay, not so", who said these words and what did Abou Ben Adhem request him?
- (ii) Why did Abou Ben Adhem receive Lord's blessings? Or what is the moral/central idea of the poem?
- (iii) Who wrote the poem Abou Ben Adhem? Who was Abou Ben Adhem? Why was his name on the top of the list?

**POEM # 07 (The Rain in Summer)**

- (i) Why is the street called fiery?
- (ii) Why do the gutter roar?
- (iii) With what does the poet compare rain? And why?

**Q.3. Important Essays:**

- (i) Blessings of Science
- (ii) Advantages and Disadvantages of Internet / Computer
- (iii) My aim in life
- (iv) A memorable day of my life
- (v) War against terrorism / Terrorism in Pakistan
- (vi) Major problems of Karachi
- (vii) Importance of English language / Education / Games
- (viii) Elections in Pakistan

**Q.4. Important Applications:**

- (i) Write an application to Headmaster/Headmistress of your school requesting him / her to allow you for participating in quiz competition held by the Board of Secondary Education Karachi.
- (ii) Write an application to the Headmaster/Headmistress of your school requesting him/her to get more reference books for the school library.
- (iii) Write an application to the Headmaster/Headmistress of your school requesting him/her to issue you the transfer/character/school leaving certificate.
- (iv) Write an application to the Headmaster/Headmistress of your school requesting him/her to properly start the computer classes at your school.
- (v) Write an application to the Headmaster/Headmistress of your school requesting him/her to arrange a trip to PAF Museum/Book Fair at Expo.
- (vi) Write an application to the Headmaster/Headmistress of your school requesting him/her to grant you concession in the school fee.

**OR****Important Letters:**

- (i) Write a letter to your younger brother advising him to leave society of bad company and to be focused on studies.
- (ii) Write a letter to the editor of newspaper drawing the attention of concern authority towards sanitary conditions (Heaps of garbage, Flowing of main hole, Broken roads) in your locality.
- (iii) Write a letter to the editor of newspaper drawing the attention of Water Board towards shortage of water supply in your locality.
- (iv) Write a letter to the editor of newspaper drawing the attention of K-Electric towards frequent power failure/electricity breakdown.
- (v) Write a letter to your younger sister advising her to join cooking classes.
- (vi) Write a letter to your friend congratulating him / her on his / her success in the Annual Examination.

**Q.5. Translation:**

Students are instructed to translate the sentence with the help of structures & techniques taught by the teacher.

**Q.6. Comprehension:**

Read the following passage and answer the questions given below.

The Arabs were equally corrupt in the field of religious life. They were idle-worshippers and were steeped in every kind of superstition. They divided their gods into male and female. There were 360 idols in the Kabah. The Arabs used to worship them till they were vanished by the Holy Prophet Muhammad ﷺ. He inspired the idol worshippers with the idea of one God. Within a brief span of about twenty-three years the Arabs were transformed into a religious nation.

- (i) What were the Arabs in the field of religious life?
- (ii) How many idols were in the Kabah?
- (iii) By whom were the idols vanished and how?
- (iv) In how many years did the Arabs transform into a religious nation.
- (v) Write the noun forms of "Corrupt" and "transform".

**OR****Important Short Notes:**

- |                    |                         |
|--------------------|-------------------------|
| (i) Village life   | (ii) The great war hero |
| (iii) Allama Iqbal | (iv) Health is Wealth   |
| (v) Bi-Aman        | (vi) Miss Fatima Jinnah |

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

### PAKISTAN STUDIES – IX

#### Important Questions for Section "B" (Short Answer Questions)

**Q.2.**

- (i) State three importance of Ideology.
- (ii) State any three characteristics of Islamic Ideology.
- (iii) Write the statements of the Quaid-e-Azam about the ideology of Pakistan.
- (iv) Write three sentences about Shah Waliullah.
- (v) Write three objectives of Mujahideen Movement / Faraizi Movement.
- (vi) Write three objectives of Aligarh Movement.
- (vii) Write three sentences on Two Nation Theory.
- (viii) Write any three aims and objectives of the establishment of All India Muslim League.
- (ix) Write few sentences on 3<sup>rd</sup> June Plan.
- (x) State three points on the Role of Quaid-e-Azam as Governor General.
- (xi) Write any three sentences on Pakistan Resolution.
- (xii) Write any three features of Objective Resolution.
- (xiii) Write any three Islamic Provisions of 1973 constitution.
- (xiv) Name any three Governors / Chief Ministers of Sindh.
- (xv) Name three of our neighbouring countries.
- (xvi) Write any three causes of environmental pollution.
- (xvii) Name three deserts of Pakistan.
- (xviii) Write three sentences on Importance of Forests.
- (xix) Write any three uses of Natural Gas.
- (xx) Name three importance industries of Pakistan and their centres of location.
- (xxi) Write any three causes of the rapid growth of population in Pakistan.
- (xxii) Write any three characteristics of the population of Pakistan.
- (xxiii) Write any three characteristics of Culture.
- (xxiv) Write the three Provincial languages of Pakistan and also write the name of poet related to each language.
- (xxv) Write down the three sentences on the utility of Urdu language.
- (xxvi) Write the names of three Muslims and Non Muslims festivals celebrated in Pakistan.
- (xxvi) Write three features of education as mentioned in National Education Policy 1998-2010.
- (xxviii) Write down three problems of education sector of Pakistan.
- (xxix) What is the literacy rate in Pakistan? Write in few sentences.
- (xxx) Write down three objectives of education of the Information Technology.
- (xxxi) Write down the three important goals of Pakistan.
- (xxxii) Write three important duties of Islamic Welfare State.
- (xxxiii) Define:

- |                     |                     |
|---------------------|---------------------|
| (a) Trade           | (b) Commerce        |
| (c) Climate         | (d) Imports Exports |
| (e) Land Pollution  | (f) E-Commerce      |
| (g) Teachers Baring |                     |

**Important Questions for Section "C"**  
**(Detailed Answer Questions)**

- Q.3. Define Islamic Ideology. Explain the sources of Islamic Ideology.
- Q.4. Define Democracy Mention the principles of democracy in Islam.
- Q.5. Describe the views of Quaid-e-Azam and Allama Iqbal on the ideology of Pakistan.
- Q.6. Describe the services of Shah Waliullah and Aligarh Movement in the Muslim revivalist movement of sub continent.
- Q.7. What role was played by the Muslim League in the struggle for Pakistan.
- Q.8. Write down fourteen points of Quaid-e-Azam.
- Q.9. What are the salient features of Objective Resolution.
- Q.10. Why did East Pakistan separated from West Pakistan? Explain the causes.
- Q.11. State the agriculture problems of Pakistan. Describe the steps which are taken by the Government of Pakistan to solve the problems.
- Q.12. What are the advantages of forests? State their importance.
- Q.13. What steps can be taken for increasing the industrial growth in Pakistan.
- Q.14. What are the causes of growth of population in Pakistan.
- Q.15. What are the main components of the scheme of studies of secondary level of education? Explain.
- Q.16. Write the National goals of Pakistan.

**Important Detailed Notes**

- (i) Importance of Urdu as National Language.
- (ii) Welfare State
- (iii) Importance of location of Pakistan.
- (iv) Main Minerals of Pakistan.
- (v) Cash Crops
- (vi) Faraizi Movement
- (vii) Pakistan Railways
- (viii) Main Industries of Pakistan
- (ix) Nuclear Energy
- (x) Environmental Problems
- (xi) Constitution of 1973
- (xii) Information Technology
- (xiii) Technical and Vocational Education
- (xiv) Two Nation Theory

# آدم جی کو چنگ سینٹر

تیاری پرچہ برائے امتحانات ۲۰۱۸-۲۰۱۷

مطالعہ پاکستان۔ جماعت نام

اہم سوالات برائے حصہ "ب" (مختصر جوابات کے سوالات)

سوال نمبر:

- (i) نظریے کی اہمیت بیان کیجئے۔
- (ii) اسلامی نظریے کی تین خصوصیات تحریر کیجئے۔
- (iii) نظریہ پاکستان قائد اعظم کے ارشادات کی روشنی میں واضح کیجئے۔
- (iv) شاد ولی اللہ کی تین اعلیٰ خدمات تحریر کیجئے۔
- (v) تحریک جاہدین یا فراہمی تحریک کے تین مقاصد تحریر کیجئے۔
- (vi) علیگز تحریک کے تین مقاصد تحریر کیجئے۔
- (vii) دو قوی نظریے پر تین جملے لکھیں۔
- (viii) آل انڈیا مسلم لیگ کے قیام کے تین اغراض و مقاصد تحریر کیجئے۔
- (ix) ۳ جون پلان سے کیا مراد ہے؟ چند جملوں میں بیان کیجئے۔
- (x) بحثیت گورنر ہائل قائد اعظم کا کروار تین جملوں میں بیان کیجئے۔
- (xi) قرارداد پاکستان پر تین جملے تحریر کیجئے۔
- (xii) قرارداد مقاصد کے کوئی تین اہم خود خال لکھیں۔
- (xiii) ۳۷۴۹ء کے آئین کی کوئی تین اسلامی دفاعات تحریر کیجئے۔
- (xiv) سندھ کے تین وزراء اعلیٰ اگورنمنٹ کے نام تحریر کیجئے۔
- (xv) پاکستان کے تین پڑوی ممالک کے نام تحریر کیجئے۔
- (xvi) ماخیانی آلوگی کے تین اسہاب تحریر کیجئے۔
- (xvii) پاکستان کے کوئی تین ریگستانوں کے نام لکھیں۔
- (xviii) جنگلات کی اہمیت پر تین جملے تحریر کیجئے۔
- (xix) قدرتی گیس کے کوئی تین استدلالات لکھے۔
- (xx) پاکستان کی تین اہم صنعتوں اور اب کے مرکز کے نام لکھے۔
- (xxi) پاکستان میں تجزی سے بڑھتی ہوئی آبادی کی کوئی تین وجہات لکھیں۔
- (xxii) پاکستان کی آبادی کی کوئی تین خصوصیات تحریر کریں۔
- (xxiii) ثافت کی تین خصوصیات تحریر کیجئے۔

(xxiv) پاکستان کی کوئی تین صوبائی رہائشوں کے نام لکھنے اور ہر زبان کے ایک ایک شاعر کا نام لکھنے۔

(xxv) اردو زبان کی افادیت پر تین جملے لکھنے۔

(xxvi) پاکستان میں منانے جانے والے غیر مسلمانوں کے اور تین غیر مسلمانوں کے تہواروں کے نام لکھنے۔

(xxvii) قومی تعلیمی پالیسی ۲۰۱۰ء تا ۱۹۹۸ء میں بیان کردہ تعلیم کے کوئی تین اہم خود خال تحریر کر جائے۔

(xxviii) پاکستان میں تعلیم کے شعبے کے کوئی تین اہم سائل لکھنے۔

(xxix) پاکستان میں خواجہ گی کی شرح کس حالت میں ہے۔ چند جملوں میں لکھنے۔

(xxx) انفارمیشن بینکنالوگی کی تعلیم کے کوئی تین مقاصد لکھنے۔

(xxxi) پاکستان کے تین اہم قومی مقاصد لکھنے۔

(xxxii) اسلامی فلاحی ملکت کی تین اہم ذمہ داریاں لکھنے۔

(xxxiii) تعریف کر جائے۔

درآمدات برآمدات	کاروبار	(a)	آب و ہوا	(d)	تجارت	(b)
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زمنی آلوگی	(e)	تریبیت اسائندہ	(g)	ای-تجارت	(f)
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### اہم سوالات برائے حصہ "ج" (تفصیلی جواب کے سوالات)

سوال نمبر ۳۔ اسلامی نظریہ سے کیا راد ہے؟ اسلامی نظریہ کے مأخذ تفصیل سے بیان کر جائے۔

سوال نمبر ۴۔ جمہوریت کی تعریف بیان کر جائے نیز اسلام میں جمہوریت کے اصول تفصیل سے بیان کر جائے۔

سوال نمبر ۵۔ نظریہ پاکستان پر قائد اعظم اور علماء اقبال کے انکار کی وضاحت کر جائے۔

سوال نمبر ۶۔ بر صغری میں تحریک احیائے اسلام میں سے شاہ ولی اللہ اور علی گڑھ تحریک کی خدمات بیان کر جائے۔

سوال نمبر ۷۔ قیام پاکستان کی جدوجہد کے سلسلے میں آل اٹھیا مسلم ایگ کا کردار تفصیل سے بیان کر جائے۔

سوال نمبر ۸۔ قائد اعظم کے پڑوہنکات بیان کر جائے۔

سوال نمبر ۹۔ قرارداد مقاصد کے اہم خود خال کی وضاحت کر جائے۔

سوال نمبر ۱۰۔ مشرقی پاکستان، مغربی پاکستان سے کیسے جدا ہوا۔ اسباب بیان کر جائے۔

سوال نمبر ۱۱۔ پاکستان کے اہم زرعی مسائل کیا ہیں؟ ان مسائل کو حل کرنے کے لئے کے جانے والے حکومت پاکستان کے اقدامات کی وضاحت کر جائے۔

سوال نمبر ۱۲۔ جنگلات کے فوائد کیا ہیں اور انکی اہمیت بیان کر جائے۔

سوال نمبر ۱۳۔ پاکستان میں صنعتی ترقی کے فروغ کے لئے اقدامات کے جانے چاہئیں۔

سوال نمبر ۱۴۔ پاکستان میں افزائش آبادی کی وجہات بیان کر جائے۔

سوال نمبر ۱۵۔ تعلیم کی ہانوئی سطح پر تعلیمی نصاب کے اہم اجزاء کیا ہیں؟ بیان کر جائے۔

سوال نمبر ۱۶۔ پاکستان کے اہم قومی مقاصد بیان کر جائے۔

### اہم تفصیلی نوٹ

پاکستان کے محل و قوع کی اہمیت	(iii)	فلاحی ملکت	(ii)	اردو کی اہمیت بطور قومی زبان	(i)
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فرانسی تحریک	(vi)	نقداً و رصلیس	(v)	پاکستان کی اہم مدد نیتات	(iv)
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نیو کلیانی تووانائی	(ix)	پاکستان ریلوے	(viii)	پاکستان کی اہم صنعتیں	(vii)
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انفارمیشن بینکنالوگی	(xii)	۱۹۷۳ء کا آئینہ	(xi)	ماہولیاتی مسائل	(x)
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فی اور پیشہ ورانہ تعلیم	(xiv)	دو قومی نظریہ	(xiii)
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# آدم جي ڪوچنگ سينتر

سالیانی امتحان جي تاري جو پيپر ٢٠١٨ء - ٢٠٢٠ء

مسنون: سنڌي

(حصہ «ب»)

- اهم سوال:- (۱) هن حج کي «حجتہ الوداع چو ٿو چيو وجي ۽ نبي ڪريم ﷺ جن زالن، بارن، ڀيمن ۽ سکين واسطي ڪهڙيون نصيحتون ڪرڻ فرمائون؟
- (۲) اسلام قبول ڪرڻ کان پوءِ حضرت سلمان ڪهڙيون خدمتون سرانجام ڏنيون؟
- (۳) حضرت امام جعفر صادق ڪهڙن استادن وٽ تعليم حاصل ڪئي؟
- (۴) فائداعظم شاگردن کي نصيحت ڪندی ڪهڙن گاڻهن ڏانهن سنڌن ڏيان چڪابو آهي ۽ فائداعظم جي خيال موجب پاڪستان ڪهڙن منصنن کي حاصل ڪرڻ لاءِ قائم ڪيو ويو آهي؟
- (۵) مائي خيري ڪهڙا ڪهڙا خير جا ڪم ڪيا؟ مائي خيري ڪڏهن وفات ڪئي ۽ سنڌس مقبرو ڪئي آهي؟
- (۶) بين الاقوامي ڪهڙا ڪهڙا ڪم ڪندی آهي ۽ بين الاقوامي عدالت جي ججن جي چونڊ ڪهڙي ريت ٿيندي آهي؟
- (۷) وادي مائي کي ڪهڙو شرط ٻڌايو ۽ چوکري اُث جي هڏن مان چا ٺاهيا؟
- (۸) اتحاد مان ڪهڙا فائدا آهن ۽ اتحاد نه هئن ڪري قوم کي ڪهڙو نقصان ٿيندو؟
- (۹) مولانا وفائي جي ٿنڍپڻ بابت اوهان کي ڪهڙي خبر آهي ۽ مولانا وفائي کي ڪهڙن بزرگن جي ڪچھري مان فيض حاصل ٿيو؟
- (۱۰) ڊزانين ۽ رنگ جي لاحاظ کان اجرڪ جا گھٹا قسم آهن ، اجرڪ جا ڪهڙا چار رنگ ٿيندا آهن ۽ اجرڪ سند جي ڪهڙن شهرون ۾ نهي ٿي؟
- (۱۱) ميرن جي اخلاق بابت برنس چا لکيو آهي ۽ ميرن جي پوشاك ڪهڙي قسم جي هئي؟
- (۱۲) نوري جي قبر ڪئي آهي ۽ ڪينجهر «لڳن» اصطلاح جي معنى ڪهڙي آهي؟
- (۱۳) سومرن جي دور جون سنڌي ادب بابت ڪهڙيون گاڻهيوون معلوم ٿيون آهن ۽ عربن جي دور ۾ سنڌي ادب جا ڪهڙا اهڃاڻ ملن ٿا؟ تالپرن جي دور جا ڪهڙا مشهور شاعر ٿي گذر يا آهن؟
- (۱۴) سليم وڌي چونه ٻڌا هي سگهيو ۽ گوث جي تبا هي ڏسي ارشد دل ۾ ڪهڙو فيصلو ڪيو؟

.....  
هلندڙ.....

- (۱۵) پادشاہ پھریوں ۽ پیو پیرو ڪھڙو خواب لدو ؟
- (۱۶) پنهون جي جدائی ه سئی کي پیور ڪیئن ٿو نظر اچي ۽ پنهنجي محبوب جي انتظار ه  
شاعر جو وقت ڪیئن ٿو گذري ؟
- (۱۷) ڏيٺي ه ڪھڙي چگائي رکيل آهي ۽ ڏيٺي وٽ نوڙت جي ڪھڙي نشاني آهي ؟
- (۱۸) بلندی حاصل ڪرڻ لاءِ شاعر ڪھڙي صلاح ٿو ڏي ۽ اسلام جي ڪلمي لاءِ شاعر  
ڪھڙي دعا ٿو گھري ؟
- (۱۹) نصريور ڪھڙن هرن جي ڪري مشهور هو ۽ ڪلهوڙن جي آخری ڏينهن ه نصريور ه  
ڪنهن ڦرُلت ڪئي ؟
- (۲۰) جنگ ۽ فساد جو باعث ڪھڙيون گالهيوں آهن ؟ هاري جي محنت ڪھڙو رنگ ٿي لڳاني
- (۲۱) رڏپچاءُ ۽ ڪاڌي پيٽي جا ٿانو ڪھڙي ریت صاف ڪرڻ گھرجن ؟  
اهم جملاء: - رڻ - پڏرناسو - سعماڻ - هڳاءُ - داستان - نپيرو - ناماچار - وندر - هاڪارا -  
نسبي - ڪارڻ - گشني - پيلي - هاك - جدوجهد - ٻانهن - رحلت - رائج - سوڪڙي - ڏونگر -  
پڃاڻو - احترام - سانت - بهبود - ڏيساور - سهاياري - ڄمار - داستان - اوچ -  
ڇار - گندڻ - چهجتو - جيڙو - رائج - سُهائي - جهون .  
اهم گرامر: - حرف جملو، اسم - فعل - ضمير - ظرف  
واحد، جمع - لفظ، ضد ۽ مذكر، موئث ذهن سان جي پھرون مان ياد ڪندا
- (حصو «ح»)**
- اهم مضمون: - تندريستي هزار نعمت آهي - محنت جي عظمت - قويي هيرو - ڪراچي شهر - منهن جو  
پسنديده كتاب / شاعر - ڪلفتن جو سير، وطن جي حب - بهار جي موسم
- اهم درخواستون: - اسکول ه داخلا / اسکول ڇڏن لاءِ ، ڪريڪتر ۽ پرو ويزن سرتينيڪيت لاءِ ، في  
معافي لاءِ - موکل لاءِ، بارن جو عاليٰ ڏهاڙو ملهاڻن لاءِ - عيد ميلاد النبى ﷺ ملهاڻن لاءِ، ڇندو گڏ ڪرڻ لاءِ ،  
ڊسپير جو ڏهاڙو ملهاڻن لاءِ -
- اهم خط: - دوست کي ڪراچي گھيئن لاءِ خط، دوست کي بيماري مان صحت يابي جو خط / امتحان  
۾ ڪاميابي لاءِ، والد صاحب کي كتاب ۽ ڪاپيون خريد ڪرڻ لاءِ پشا طلب ڪرڻ لاءِ .
- اهم سمجھائيون: - (۲) دعا نظم جو شعر نمبر: ۵ (۲) نظم نيكى: بند ۲۰۲۰۱  
(۳) نظم سچل سرمست جا بيت: شعر نمبر ۲ (۵) نظم ڏيو: بند نمبر ۲، ۳، ۴، ۵، ۶
- (۶) بنايون سُک جو ڪو سنسار نظم: شعر نمبر ۱، ۲ (۷) پيارا وطن نظم: شعر نمبر ۱، ۲، ۳، ۴
- (۸) هاري نظم: شعر نمبر ۱، ۲، ۳، ۴
- اهم خلاصاء: - حضرت امام جعفر صادق - هنر دولت آهي - ڪينجهر ڏيندي - ميرن جي دربار  
- اتحاد، تنظيم ۽ ڀقين محڪم - مولانا دين محمد وفائی - اجرڪ - جهڙو راج تهڙو ڀاڳ

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

ENGLISH - X

### Important Questions for Section "B" (Short Answer Question)

**Q.1. Grammar Section:**

- |       |   |   |                        |   |             |  |
|-------|---|---|------------------------|---|-------------|--|
| (i)   | Do as directed:   |   |                        |   |             |  |
| *     | Tenses  | * | Active & Passive Voice | * | Preposition |  |
| *     | Direct & Indirect Speech  |   |                        | * | Articles    |  |
| (ii)  | Practice all the tenses, voices, narrations as per teacher's method.                      |   |                        |   |             |  |
| (iii) | Translate sentences with the help of structures and techniques instructed by the teacher. |   |                        |   |             |  |

**Note:** Following the rules and structures taught in the class during academic session students can excel in aforementioned topics. Learn all the tenses, voices, narrations as per teacher's method.

**Q.2. (a)****PROSE SECTION****CHAPTER # 2 (The Wise Caliph)**

- (i) How did the Caliph discover the real owner of the horse? Or How did the Caliph prove that beggar was a liar?
- (ii) What was the reaction of the horse when the rich man touched it?
- (iii) How did the beggar try to rob the rich man of his horse?
- (iv) What was Caliph Haroon-ur-Rasheed known and respected for? Why did Caliph disguise himself? OR Why did the Caliph Haroon-ur-Rasheed go through the streets of Baghdad at night?

**CHAPTER # 3 (Professions)**

- (i) Why is fish important for us? Why do people like fresh water fish?
- (ii) What are the qualities of a good teacher? What does "Akhund" mean?
- (iii) What are the different modes of fishing?
- (iv) From where fresh water fish are caught and how is it done?
- (v) How does a teacher fulfill God's command?
- (vi) How is the government taking interest in improving and modernizing the fish industries?

**CHAPTER # 5 (A Visit)**

- (i) What does a thresher do?
- (ii) What is the name of the machine working in the wheat field and what does it do?
- (iii) What is the difference between the old and the new method of farming?
- (iv) What is an average produce from an ordinary farm? What is the produce per hectare on the Model farm?
- (v) How are ploughing, seeding and harvesting done on the model farm?
- (vi) How would we able to meet the needs of ever growing population of our country?
- (vii) What would the Model Agricultural Farm use to milk the animals? What would modern machinery make from milk?
- (viii) What surprised the boys when they reached the model farm?

**CHAPTER # 6 (King Faisal)**

- (i) When was King Faisal made King? How did King Faisal develop his country?
- (ii) Why was King Faisal against the state of Israel? What did he do for Arabs in war against Israel?
- (iii) How was King Faisal killed? How did Muslims feel over the death of the King?
- (iv) Why did King Faisal consider education very important for the progress of his people and what did he do for it?
- (v) What were King Faisal feelings about Pakistan?
- (vi) What did King Faisal do for the health-care of his people?

**CHAPTER # 8 (Dignity of Work)**

- (i) How did the Holy Prophet ﷺ and his companion set an example of dignity of work?
- (ii) How did Sultan Nasir-Uddin earn his living?
- (iii) How did Emperor Aurangzeb earn his living? How do Muslim rulers earn their living?
- (iv) What does everyone do in China? OR How has China been able to make such a rapid progress in all walks of life?
- (v) How did the famous Muslim rulers set the examples of dignity of work?

**CHAPTER # 11 (A Village Fair)**

- (i) What is Tent-Pegging? And how is it played?
- (ii) How did jugglers and conjurers entertain the people at the village fair?
- (iii) What were different entertainments in the fair for children?
- (iv) What made the dogs run in the dog race?
- (v) What was a man doing on a tight rope?

**CHAPTER # 13 (Shopping)**

- (i) When do we use meter, kilometer, kilogram and litre?
- (ii) What is the difference between beef and mutton?
- (iii) Why the children were surprised when their mother asked them to go for shopping with her?
- (iv) What did mother tell the children about the disadvantages of polythene bags?

**OR**

How do the polythene bags harm for the environment?

**CHAPTER # 15 (An African Village)**

- (i) Why do bush dwellers of Nigeria use wood at night?
- (ii) Who tends the cash and food crops in Nigeria?
- (iii) Why can Nigerian farmers not rear cattle?
- (iv) What are major exports of Nigeria and how are they extracted?
- (v) Where is Nigeria? What sort of a country is it?

**CHAPTER # 17 (The Inheritors)**

- (i) What property did the two brothers inherit from father and what did Azam suggest for division?
- (ii) Who fed the cow and who got the milk? Why did Azam not give dates to Moazzam?
- (iii) What did Moazzam do when Azam was milking the cow?
- (iv) How did Moazzam teach the lesson to his elder brother?
- (v) How can you say that Moazzam was simple and trusting?

**CHAPTER # 19 (The Khyber Pass)**

- (i) What is Khyber Pass? How long is it? Where do we go through this pass?
- (ii) What is the commercial/historical importance of Khyber Pass?
- (iii) What is Torkham? What did students see there? And who welcomed them?
- (iv) Who lives in the mountains of the Khyber Pass and which is the highest place along the pass?
- (v) What were the feelings of children when they stood looking of the little of for visiting the Khyber Pass?

**CHAPTER # 21 (How to Do Things)**

- (i) Describe the process of mending a puncture?
- (ii) How is the puncture mended at a cycle shop?
- (iii) What does the kit for mending the puncture contain?
- (iv) What games were arranged for the guests?
- (v) How are the "Parcel" and "Treasure hunt" game played?
- (vi) What was the menu of the party and what was written on the cake?

**CHAPTER # 23 (Making a Summary)**

- (i) How to make a good summary? or  
What skills are required to make a good Precise? Describe any three of them.
- (ii) What is a good summary?

**CHAPTER # 25 (The Customs of Various Regions of Pakistan)**

- (i) Who are the famous saints of Sindh? What are the famous craft of Sindh?
- (ii) What do you know about the Civilization of "Valley of Mehran"?
- (iii) What is Chopal? What Punjabi do there in the evening?
- (iv) How and why does a tribesman announce the birth of a son?
- (v) Why is the Punjab called "the heart of Pakistan" or "seat of learning"?
- (vi) What is the result of extreme weather on the lives of Balochis?
- (vii) What is the natural scenery of various regions of Pakistan?
- (viii) What is a "Sandly"?
- (ix) What are the famous craft of Sindh or Punjab?

**Q.2. (b)****POEM SECTION****POEM # 1 (The Voice of God)**

- (i) Who wrote the poem "The Voice of God", and what is the message of the poem?
- (ii) Why did the poet climb the steeple and why did God ask him to go down again in the poem "The Voice of God"?      **OR**    What does the poet want us to do?
- (iii) With reference to the poem, "The Voice of God"; explain the idea of serving the humanity.

**POEM # 2 (Little Things)**

- (i) Who wrote the poem "Little Things"? What was the idea behind the poem and how can we make our world an Eden?
- (ii) What is the importance of little things in our daily life?

**POEM # 3 (From a Railway Carriage)**

- (i) How is the railway journey a source of happiness? Or what pleasure does the railway journey give to the poet?
- (ii) Who is a tramp? What was he doing when the railway carriage passed by?
- (iii) What did the poet see from a railway carriage?

**POEM # 4 (A Nation Strength)**

- (i) What can make a nation strong? What kind of men can lift their country to the sky?
- (ii) Why the people called the strength of nation? What is the message of the poem "A Nation's Strength".
- (iii) What kind of people raise the dignity of nation?

**POEM # 5 (Beautiful Hands)**

- (i) Whose hands are praised in the poem "Beautiful Hands" and why?
- (ii) What does poetess mean by the words "these hands must folded be"?
- (iii) Why does the poetess intend to clasp her mother's hand?

**POEM # 6 (Speak Gently)**

- (i) Why should we speak gently to others? What are advantages of speaking gently?
- (ii) What lesson do we learn from poem "Speak Gently"?
- (iii) How can we win the heart of people?

**POEM # 7 (The Hand that Rocks the Cradle)**

- (i) Why does the poet compare mother's hand to a rainbow?
- (ii) Why does the poet say that the prayer from mothers on earth mingle with that said in heaven?
- (iii) What is guided by angles and how? What role of mother as brought out in the poem "The Hand that Rocks the Cradle"?
- (iv) Explain how the poet gives the credit for all great achievements of people to their mothers?

**POEM # 8 (King Bruce)**

- (i) Who has composed the poem "King Bruce"? What lesson do we get from it? Or what does it teach to its reader?
- (ii) Who was King Bruce? Why did king bruce decide not to give up? What lesson did he learn from the spider?
- (iii) Why was King Bruce sad? How did failure of spider brace the mind of King Bruce?

**POEM # 9 (Casabianca)**

- (i) Who was Casabianca? What qualities did the boy in "Casabianca" possess?
- (ii) Why did Casabianca not leave the burning deck? What lesson do we learn from poem "Casabianca"? OR What does the poetess teach you through the poem Casabianca?

**POEM # 10 (The Minstrel Boy)**

- (i) Who was the Minstrel Boy? What had he girded on? What did he say about it?
- (ii) Why did Minstrel Boy destroy his harp?
- (iii) "The Minstrel Boy" expresses the patriotic feeling do you agree?

**POEM # 11 (The Uses of Adversity)**

- (i) What is the moral of the poem "The uses of Adversity"?
- (ii) What examples are given in the poem "The Uses of Adversity" to show hardship make life better?

**POEM # 12 (There's a Good Time Coming)**

- (i) Who has written the poem "There's a Good Time Coming"?
- (ii) What future does the poet promise for us in the poem "There's a Good Time Coming"? Do you agree with the poet, why?

**POEM # 13 The Man Who Wins**

- (i) What according to the poet, qualities are needed by a person to get success in life in the poem "The Man Who Wins"?
- (ii) Who wrote the poem "The Man Who Wins"? Do you agree with the message of the poem? Why?

**Important Questions for Section "C"**  
**(Detailed Answer Question)**

**Q.3. Important Essays:**

- |  |   |
|--|---|
| (i) Terrorism / War against Terrorism        | (v) Importance of Computer Education            |
| (ii) An exciting Cricket Match               | (vi) Blessings of Science                       |
| (iii) Traffic Problems / Hazards in Karachi. | (vii) Uses and Abuses of Internet               |
| (iv) Karachi, Mega City Mega Problems        | (viii) Environmental Pollution / Global Warming |

**Q.4 Important Applications**

- (i) Write an application to the Headmaster/Headmistress of your school requesting him/her to issue you the provisional/sports/character/transfer certificate.
- (ii) Write an application to the Headmaster/Headmistress of your school requesting him/her to grant you leave after recess as you have an appointment with the doctor.
- (iii) Write an application to the Headmaster/Headmistress of your school to allow your class to visit the Science or Computer Exhibition at Expo Centre.
- (iv) Write an application to the Headmaster/Headmistress of your school to grant concession in school fee.
- (v) Write an application to the Headmaster/Headmistress of your school to allow you to participate in inter-school quiz competition?
- (vi) Write an application to the Headmaster/Headmistress of your school requesting him/her to grant you leave for fifteen day to perform Umrah.

OR

**Important Letters:**

- (i) Write a letter to the editor of a newspaper complaining against the bad condition of roads in your city.
- (ii) Write a letter to the Mayor/Nazim of your area complaining of the insanitary condition in your area and the negligence of the staff responsible for the job.
- (iii) Write a letter to your father asking him to send some money for buying books.
- (iv) Write a letter to the Editor complaining against frequent power failure / electricity breakdown in your area.
- (v) Write a letter to the Editor complaining about shortage of water supply.
- (vi) Write a letter to the Editor of a newspaper complaining against the heap of garbage in the city.

**Q.5. Translation:**

Students are instructed to translate the sentence with the help of structures & techniques taught by the teacher.

OR

**Summary**

The world victory is generally associated in our mind with war and calls up vision of battles, bloodshed and conquest by force and we think of war as a glorious thing. But when we think of the achievements of great man, statesmen, scholars, social reformers, scientists, explorers, discoverers and honest workers for the betterment of human race and progress of civilization of the world, we realize, that the victories of peace are even glorious than the victories of war.

**Q.6. Passage/Comprehension:**

Another thing that is essential to good health is rest. When food is burnt in the cells of the body at a high rate of speed the blood cannot carry away the waste materials as fast as they are formed. They therefore accumulate in the cells and prevent them from working properly, causing fatigue. Fatigue makes people ill-tempered slows up their thinking power and causes them to make mistakes and lower their resistance to disease. Sitting or lying down quietly is a good way of resting and so is working at some hobby that does not require much physical energy but nothing can take the place of sleep.

- (i) Why can the blood not carry away the waste materials as fast as they are formed?
- (ii) What is the cause of fatigue?
- (iii) How is fatigue harmful to us?
- (iv) What is the best form of rest for a man?
- (v) Give the noun forms of 'prevent' and 'accumulate'.

OR

**Write a short note on any one of the following:**

- |                           |                   |                       |
|---------------------------|-------------------|-----------------------|
| (i) The Chopal            | (ii) A Model Farm | (iii) Dignity of Work |
| (iv) Khyber Pass          | (v) Tent-Pegging  | (vi) King Faisal      |
| (vii) Village Fair / Life | (viii) King Bruce | (ix) Fishing          |
| (x) Casabianca            |                   |                       |

# آدم جی کو چنگ سینٹر

تیاری پپر برائے امتحانات ۲۰۱۸-۲۰۱۹

اسلامیات (لازی)۔ جماعت دہم

## اہم سوالات برائے حصہ (مختصر جواب کے سوالات)

- (i) سورۃ الانفال میں مومنین کی کیا صفات بیان کی گئی ہیں؟
- (ii) سورۃ الانفال میں مسلمانوں کی جہاد کے لئے تیاریاں دیکھ کر منافقین نے کیا تبرہ کیا؟
- (iii) سورۃ الانفال کی روشنی میں تقویٰ کے کوئی تین انعامات تحریر کیجئے۔
- (iv) سورۃ احزاب میں حد بولے بیٹے کے بارے میں کیا ہدایت دی گئی ہے؟
- (v) قرآن کریم نے جہاد کی تیاری کے بارے میں کیا حکم دیا؟
- (vi) سورۃ احزاب میں اللہ تعالیٰ نے رسول ﷺ کیا مقام و منصب بیان کیا ہے؟
- (vii) نبی کریم ﷺ پر درود وسلام کی کیا اہمیت ہے اور اسے متعلق مسلمانوں کو کیا حکم ہے؟ نبی حضرت محمد ﷺ سے محبت پر تین جملے لکھیے۔
- (viii) سورۃ احزاب میں مسلمان عورتوں کو پردے کے بارے میں کیا ہدایت دی گئی ہے؟
- (ix) احادیث کی روشنی میں متدرج ذیل سوالات کے جوابات تحریر کیجئے۔
  - ۱۔ لا الہ الا اللہ میں لفظ اللہ سے کیا مراد ہے؟
  - ۲۔ صحیل ایمان کے چار اصول تحریر کیجئے۔
  - ۳۔ حدیث کی روشنی میں نماز کی اہمیت اور خطبہ جمع کے تین آداب تحریر کیجئے۔
  - ۴۔ حدیث کی روشنی میں روزے کی اہمیت اور روزہ وار کی دو خوشیوں سے کیا مراد ہے؟
  - (x) قرآن مجید کو بھیل کتابوں کے لئے تھیمن کیوں کہا گیا ہے۔ نبی کا تدبیح دی سے کیا مراد ہے؟
  - (xi) دھواں اور غسل کے فرائض تحریر کیجئے۔ نبی مسنون غسل کوں کون سے ہیں؟ مسنون غسل کا طریقہ تحریر کیجئے اور طہارت کے پانچ فائدے بیان کریں۔
  - (xii) سورۃ الانفال میں دو گروہوں سے کیا مراد ہے؟
  - (xiii) کفار کے ساتھ مقابلے کی صورت میں مسلمانوں کو کونے کام کرنے اور کن ہاتوں سے بچے کا حکم دیا گیا ہے؟
  - (xiv) شر الدوآب کے معنی لکھیے اور اس سے کون لوگ مراد ہیں؟
  - (xv) وَذِي مَكْرَ بَلَّ الذِّينَ كُفَّارًا میں کس واقعہ کی طرف اشارہ ہے؟

- (xvi) کفار کے مطالبے کے باوجود اللہ تعالیٰ نے ان پر عذاب کیوں نازل نہ کیا؟
- (xvii) اللہ تعالیٰ نے غزوہ بدر میں مسلمانوں کے لئے کن خصوصی انعامات کا ذکر فرمایا ہے؟
- (xviii) سورۃ الانفال میں فرمون اور آل فرمون کی بحث اور بر بادی کے کیا اسباب بیان کے گئے ہیں؟
- (xix) اللہ تعالیٰ نے مسلمانوں کو جہاد پر بھارنے کیلئے کیا ترغیب دی؟
- (xx) ہجرت سے کیا مراد ہے؟ اللہ تعالیٰ نے ہجرت اور رفتہ کے بارے میں کیا بتیں ارشاد فرمائیں؟ نیز کس موقعوں پر ہجرت کرنا لازمی ہے؟
- (xxi) قولوا فولاً سدیداً کا مظہر بتائیے اور ہمارے لئے اس میں کیا رہنمائی ہے؟
- (xxii) اللہ تعالیٰ نے ہجرت کر کے آنے والی موسم عورتوں کے بارے میں اہل ایمان کو کیا تلقین فرمائی ہے؟
- (xxiii) جب اہل کفر مسلمانوں پر غلبہ پائیتے ہیں تو انکا اہل ایمان کے ساتھ کیا سلوک ہوتا ہے؟
- (xxiv) سورۃ الحجۃ میں حضرت ابراہیم کے کس اسوہ حسن کی تجدید کا حکم دیا گیا ہے؟
- (xxv) قرآن کی روشنی میں ختم نبوت کا مضمون واضح کریں۔
- (xxvi) اللہ تعالیٰ کی محبت و اطاعت پر تم جملے خبر کیجیے نیز اللہ تعالیٰ کی تم صفاتیں ختنہ کر کیجیے۔
- (xxvii) کفار کی جانب سے مہدھلکی کی صورت میں اللہ تعالیٰ نے نبی ﷺ کو کیا ہدایات دیں؟
- (xxviii) اللہ تعالیٰ نے ازاد انبیاء کی کوئی دعویٰ کی کیا تحریر کرنے کا حکم دیا؟
- (xxix) سورۃ الحجۃ کی روشنی میں بتائیے کہ اللہ تعالیٰ نے کس طرح کے کفار کے ساتھ عدل و احسان کی اجازت دی ہے نیز اہل ایمان کا اسلام دشمن کافروں کے ساتھ کیا سلوک ہونا چاہیے؟
- (xxx) سورۃ الحجۃ میں دشمنان حق کی کون باتوں کے سبب انھیں دوست اور ازادان بنانے سے منع کیا گیا ہے؟
- (xxxi) شتر کے تین طریقے بیان کیجیے۔
- (xxxii) رشت کے بارے میں آپ ﷺ کا کیا فرمان ہے؟
- (xxxiii) کس شخص کا صبر مشہور ہے اور کیوں؟ صبر کرنے پر اللہ تعالیٰ نے انھیں کیا اقبال دیا؟
- (xxxiv) قرآن پاک پڑھنے اور پڑھانے کے بارے میں نبی پاک ﷺ کیا ارشاد ہے؟ نیز قرآن پاک کے تین فضائل بیان کریں۔
- (xxxv) سورۃ الاحزاب کی ابتدائی آیات میں رسول اکرم ﷺ کو کون باتوں کی تلقین کی گئی ہے؟
- (xxxvi) سورۃ الاحزاب میں جہاد میں رکاوٹ ڈالنے والوں کے بارے میں کیا فرمایا گیا ہے؟ نیز سورۃ الاحزاب میں قیامت کے متعلق کیا فرمایا گیا ہے؟
- (xxxvii) اللہ اور اُس کے رسول ﷺ کے فضیلوں کے بارے میں اہل ایمان کا کیا طرز عمل ہونا چاہیے؟
- (xxxviii) اہل ایمان کو رسول کرم ﷺ کے گھرانے کے بارے میں کیا آداب سکھائے گئے ہیں؟
- (xxxix) اسلام میں حصول علم کی اہمیت بیان کریں۔ رسول کرم ﷺ نے علم میں اخانے کے لئے کوئی دعا فرمائی؟
- (xxxx) زکوٰۃ اداۃ کرنے والوں کو قرآن نے کیا دعید سائی ہے؟
- (xxxxi) رسول پاک ﷺ کے لئے نماح کے کیا خصوصی ضوابط بیان کے گئے ہیں؟

## اہم سوالات برائے حصہ "ج" (تفصیلی جواب کے سوالات)

### سوال نمبر ۱: عبارات کا ترجمہ کیجئے۔

- (i) وَاعْلَمُوا أَنَّمَا أَمْوَالُكُمْ وَأُولَادُكُمْ فِتْنَةٌ، وَأَنَّ اللَّهَ عِنْدَهُ أَجْرٌ عَظِيمٌ۔
- (ii) وَاعْلَمُوا أَنَّ اللَّهَ يَحُولُ بَيْنَ الْمُرْءَ وَقَلْبِهِ۔
- (iii) إِنَّ شَرَ الدُّوَابِ عِنْدَ اللَّهِ الصُّمُ الْبُكُمُ الَّذِينَ لَا يَعْقِلُونَ۔
- (iv) وَقَرَئَ فِي يَوْمٍ تَكُنُّ وَلَا تَبَرُّجَنَ تَبَرُّجَ الْجَاهِلِيَّةِ الْأُولَى۔
- (v) مَا جَعَلَ اللَّهُ لِرَجُلٍ مِّنْ قَبْلِنَا فِي جَهَنَّمِهِ۔
- (vi) فَمِنْهُمْ مَنْ قَضَى نَحْبَةً وَمِنْهُمْ مَنْ يَنْتَظِرُ۔
- (vii) عَسَى اللَّهُ أَنْ يَجْعَلَ بَيْنَكُمْ وَبَيْنَ الَّذِينَ عَادُتُمْ مِّنْهُمْ مَوْدَةً وَاللَّهُ قَدِيرٌ وَاللَّهُ عَفُورٌ رَّحِيمٌ۔
- (viii) لَقَدْ كَانَ لَكُمْ فِيهِمْ أُسْوَةٌ حَسَنَةٌ لِمَنْ كَانَ يَرْجُو اللَّهَ وَالْيَوْمَ الْآخِرَ وَمَنْ يَتَوَلَّ فَإِنَّ اللَّهَ هُوَ الْغَنِيُّ الْحَمِيدُ۔
- (ix) يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَتَوَلَّوْا قَوْمًا غَضِيبَ اللَّهُ عَلَيْهِمْ قَدْ يَعْسُوُا مِنَ الْآخِرَةِ كَمَا يَعْسَى الْكُفَّارُ مِنْ أَصْحَابِ الْقُبُوْرِ۔
- (x) وَمَا رَمَيْتَ إِذْ رَمَيْتَ وَلَكِنَّ اللَّهَ رَمَيْتَ
- (xi) يَا أَيُّهَا الَّذِينَ آمَنُوا إِذَا لَقِيْتُمُ الَّذِينَ كَفَرُوا ازْحَافًا فَلَا تُؤْلُهُمُ الْأَدْبَارَ
- (xii) إِنْ يَتَقْفُوْكُمْ يَكُونُوْ لَكُمْ أَعْدَاءٌ وَيُسْطُوْا إِلَيْكُمْ أَيْدِيهِمْ وَالْبَسْتَهُمْ بِالسُّوءِ وَوَدُوْ الْوَرْكَفُرُوْدُ ه
- (xiii) هُوَ الَّذِي أَيْدَكَ بِنَصْرِهِ وَبِالْمُفْوِتِيْنِ ه وَالَّفَ بَيْنَ قُلُوبِهِمْ ه لَوْ أَنْفَقْتَ مَا فِي الْأَرْضِ جَمِيعًا مَا
- الَّفَ بَيْنَ قُلُوبِهِمْ ه وَلَكِنَّ اللَّهَ الْفَ بَيْنَهُمْ ه
- (xiv) وَالَّذِينَ آمَنُوا وَهَاجَرُوا وَجَهَدُوا فِي سَبِيلِ اللَّهِ وَالَّذِينَ أَوْأَوْ نَصَرُوا أَوْ لَيْكَ هُمُ الْمُتَوَمِّنُوْ حَقًّا
- (xv) وَمَا كَانَ لِمُؤْمِنٍ وَلَا مُؤْمِنَةٍ إِذَا قَضَى اللَّهُ وَرَسُولُهُ أَمْرًا أَنْ يَكُونَ لَهُمُ الْجِرَةُ مِنْ أَمْرِهِمْ ه
- (xvi) وَأَطِيعُو اللَّهَ وَرَسُولَهُ وَلَا تَنَازَعُوْا فَغَشَّلُوْا وَتَدَهَّبَ رِيعَكُمْ وَاصْبِرُوْا ه إِنَّ اللَّهَ مَعَ الصَّابِرِيْنَ O

سوال نمبر ۱۸: احادیث مبارکہ کا ترجمہ اور تشریح کیجئے۔

- (i) مَنْ صَلَّى عَلَىٰ مَرْءَةٍ فَتَحَ اللَّهُ لَهُ بَابًا مِنَ الْعَافِيَةِ
- (ii) إِنَّ أَكْمَلَ الْمُؤْمِنِينَ إِيمَانًا أَحْسَنُهُمْ خُلُقًا۔
- (iii) الصَّلَاةُ عِمَادُ الدِّينِ۔ وَمَنْ أَقَمَهَا فَقَدَ أَقامَ الدِّينَ وَمَنْ هَدَمَهَا فَقَدَ هَدَمَ الدِّينَ۔
- (iv) كُلُّكُمْ رَاعٍ وَكُلُّكُمْ مَسْؤُلٌ "عَنْ رُعْيَتِهِ
- (v) الرَّاشِيٰ وَالْمُرْتَشِيٰ (كَلَا هُمَا) فِي النَّارِ۔
- (vi) خَيْرُ النَّاسِ مَنْ يُنْفَعُ النَّاسَ
- (vii) مَنْ صَامَ رَمَضَانَ وَقَامَهُ إِيمَانًا وَأَحْتِسَابًا غُفْرَانَهُ مَا تَقدَّمَ مِنْ ذَنْبِهِ
- (viii) مَنْ أَغْبَرَتْ قَدْمَاهُ فِي سَبِيلِ اللَّهِ حَرَمَهُ اللَّهُ عَلَىَ النَّارِ
- (ix) مَنْ أَحَبَ لِلَّهِ وَأَبْغَضَ لِلَّهِ وَأَعْطَى لِلَّهِ وَمَنْعَ لِلَّهِ فَقَدِ اسْتَكْمَلَ الْإِيمَانُ
- (x) إِذَا قُلْتَ لِصَاحِبِكَ يَوْمَ الْجُمُعَةِ أَنْصِتْ وَلِإِمَامٍ يَخْطُبْ فَقَدْ لَعُوتَ

سوال نمبر ۱۹ اور ۲۰ کے لئے اہم سوالات

- ۱۔ (الف) قرآن مجید کا مختصر تعارف بیان کرتے ہوئے نصائل قرآن پر ثبوت تحریر کیجئے۔ نیز قرآن پاک کی خواہت کے بارے میں قرآن و حدیث کی روشنی میں بیان کریں۔
- ۲۔ (ب) اللہ تعالیٰ کی محبت اور اطاعت کو قرآن کریم کی روشنی میں بیان کریں۔
- ۳۔ (الف) قرآن و حدیث کی روشنی میں زکوٰۃ کا مفہوم، فرضیت اہمیت اور مصارف بیان کیجئے۔
- ۴۔ (ب) قرآن کریم اور حدیث کی روشنی میں علم کی فضیلت بیان کریں۔
- ۵۔ (الف) عالمی زندگی سے کیا مراد ہے؟ خاندانی نظام کی اہمیت پر ثبوت تحریر کیجئے۔
- ۶۔ (ب) صبر و شکر کی اہمیت بیان کرتے ہوئے فوائد و ثمرات تحریر کیجئے۔
- ۷۔ (الف) زوجین کے حقوق و فرائض بیان کیجئے۔      یا      اولاد کے حقوق و فرائض بیان کیجئے۔
- ۸۔ (ب) بھرت و جہاد کے فوائد و ثمرات تحریر کیجئے نیز جہاد کا مفہوم بیان کرتے ہوئے اسکی اقسام تفصیل سے لکھیے۔

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

MATHEMATICS - X

### Important Questions for Section B & C

#### CHAPTER # 1 (Sets)

**Ex. 1.1** Q.# 6 & Example # 1 and 2

**Ex. 1.2** Q.# 9 to 20

**Ex. 1.3** Q.# 1 to 5

**Miscellaneous Exercise:** Q.# 4,7, 8, 9, 11(i, ii, iii), Q.#12

#### CHAPTER # 2 (System of Real Numbers, Exponents and Radicals)

**Ex. 2.7** Q.# 5 to 14, & Example # # 1 to 3

**Ex. 2.8** Q.# 2, 3, 4, 5, 6, 7, 8, 9, 10 & Example # # 2

**Miscellaneous Exercise:** Q.# 8 to 11

#### CHAPTER # 3 (Logarithms)

**Ex. 3.6** Q.## 2, 3, 4, 5, 7, 9, 10, 11, 12, & Example # # 2

**Miscellaneous Exercise:** Q.# 2, 4, 5, 7, 8, 9, 10

#### CHAPTER # 4 (Algebraic Expressions)

**Ex. 4.3** Q.# 2 to 5

**Ex. 4.4** Q.# 9 to 12

**Ex. 4.7** Q.# 1(i to iv), 2, 3, 4, 5

**Ex. 4.8** Q.# 2

**Ex. 4.9** Q.# 2, 3, 4, 5

**Ex. 4.10** Q.# 7, 8, 9

**Miscellaneous Exercise:** Q.# 5, 6, 8, 9, 12

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#### CHAPTER # 5 (Factorization, H.C.F., L.C.M., Simplification and Square Roots)

**Ex. 5.1** Q.# 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 26, 27, 30

**Ex. 5.2** Q.# 1(ii, iii, iv, vi, vii, viii, ix), 2(i, ii, iii, iv, viii, ix) & Example #, 1, 2, 3

**Ex. 5.3** Q.# 1(ii, iv, v, vi), 2(i, ii, iii), 3(i, ii, iii), 4(ii, iii, iv)

**Ex. 5.4** Q.# 1(ii, iii, v, vi), 2(iii, v, vi), 3(i, ii, iii, iv, vi) 4(i, ii, iii, iv)

**Ex. 5.5** Q.# 1 to 5, 7

**Ex. 5.6** Q.# 1 to 6

**Ex. 5.7** Q.# 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 & Example # # 1, 2

**Ex. 5.11** Q.# 2, 3, 5

**Ex. 5.14** Q.# 1 to 14

#### CHAPTER # 6 (Algebraic Sentences)

**Ex. 6.1** Q.# 2, 7, 8

**Ex. 6.2** Q.# 1, 2, 3, 4, 6, 8 ,10 & Example # 2 and 3

**Ex. 6.3** Q.# 1, 2, 4, 6, 7, 8, 10 & Example # 1 and 2

**Ex. 6.4** Q.# 2, 4, 6, 7, 8, 10 & Example # 1

- Ex. 6.5 Q.# 1, 2, 3, 8, 9
- Ex. 6.6 Q.# 9, 11, 12, 13, 14, 15, 16 & Example # 1 & 2
- Ex. 6.8 Q.# 1 to 10 & Example # 1 & 2

**CHAPTER # 7 (Matrices)**

- Ex. 7.4 Q.# 4(e, f), 5(a, b, c), 6(i, ii, iii)
- Ex. 7.5 Q.# 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
- Miscellaneous Exercise: Q.# 4 and 5

**CHAPTER # 8 (Elimination)**

- Ex. 8.1 Q.# 1(i, ii, iii, iv, v), 2, 3(ii), 4(i, ii, iii, iv) 5(i, ii), 7, 8

**CHAPTER # 9 (Variations)**

- Ex. 9.1 Q.# 3, 4, 5, 6, 7, 8, 9, 16, 17
- Ex. 9.2 Q.# 1, 2, 3, 5, & Example # 4 and 5
- Ex. 9.3 Q.# 1 to 7 & 9, 10, 12, 13
- Miscellaneous Exercise: Q.# 7 (ii, iii), 11, 12, 13, 14

**CHAPTER # 10 (Information Handling)**

- Ex. 10.3 Q.# 6, 7, 8
- Ex. 10.4 Q.# 4, 6, 9
- Miscellaneous Exercise: Q.# 3, 4, 5, 6

**CHAPTER # 11 (Fundamental Concepts of Geometry)**

Only for MCQs

**CHAPTER # 12 (Demonstrative Geometry)**

Important Theorems 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Theorem on Inequalities

Important Theorems 1, 1(a), 2, 7, 7(a)

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**CHAPTER # 13 (Circle)**

Important Theorems 1, 2(b), 4, 5 and 6

**CHAPTER # 14 (Practical Geometry)**

- Ex. 14.4 Q.# 1(ii, iii), 2(ii), 3(i, ii, iii)
- Ex. 14.5 Q.# 3, 4, 6, 7

**CHAPTER # 15 (Trigometry)**

Trigonometric Ratios  $45^\circ$ ,  $30^\circ$  &  $60^\circ$

Ex. 15.3 Q.# 1(i, ii, iv), 2(iv, v, vii viii, ix, x), 3, & Example # 2, 3, 4

Ex. 15.4 Q.# 2(ii, vi, viii), 3(ii, vi)

Ex. 15.5 Q.# 1, 2, 3, 4, 5, 7, 8, 10

Determination of Fundamental Trigonometric identities

$$\sin^2 \theta + \cos^2 \theta = 1$$

$$1 + \tan^2 \theta = \sec^2 \theta$$

$$1 + \cot^2 \theta = \operatorname{cosec}^2 \theta$$

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

### PHYSICS - X

#### CHAPTER # 1 (INTRODUCTION TO PHYSICS)

- Q.1. Define Physics and write the names of branches of Physics.  
 Q.2. Define scientific method with steps.  
 Q.3. Define Error. What are the different types of Error?  
 Q.4. Write down the contribution of:  
     (a) Yaqub-Al-Kindi      (b) Ibn-Al Haitham      (c) Dr. Abdul Qadeer Khan

#### CHAPTER # 2 (MEASUREMENT)

- Q.1. Define standard of:  
     (a) Mass                          (b) Length                          (c) Time  
 Q.2. Define:  
     (a) Least count                 (b) Significant figure             (c) Accuracy  
 Q.3. Write down some derived quantities with their units and symbols.

#### CHAPTER # 3 (KINEMATICS OF LINEAR MOTION)

- Q.1. Difference between  
     (a) Speed & Velocity.      (b) Scalar quantity and Vector quantity  
 Q.2. Define:  
     (a) Kinematics                 (b) Mechanics                     (c) Dynamics  
 Q.3. Derive the second and third equation of motion.

**Solved examples:** 38, 40, 41

**Important Problems:** 3.1, 3.3, 3.6, 3.9, 3.11, 3.12 3.13

#### CHAPTER # 4 (FORCE AND MOTION)

- Q.1. State law of Inertia. And prove  $F = ma$  by using Newton's law.  
 Q.2. Define tension. Motion of two bodies connected with string (case I and II) find acceleration and tension.  
 Q.3. What is Momentum? Also state law of Conservation of Momentum.  
 Q.4. Define friction. Write down its expression and on what factors it depends?  
 Q.5. Write down the different types of friction.

**Solved examples:** 4.2, 4.5

**Important Problems:** 4.2, 4.3, 4.5, 4.7

#### CHAPTER # 5 (VECTORS)

- Q.1. Explain the addition of vectors by head-to-tail rule.  
 Q.2. Define subtraction of a vector. Explain it with one example.  
 Q.3. Resolution of vector by Rectangular Component method.

**Solved examples:** 5.3, 5.4

**Important Problems:** 5.5, 5.6

## CHAPTER # 6 (EQUILIBRIUM)

- Q.1. Define two like and unlike parallel forces.  
Q.2. Define Equilibrium? Write down its two conditions.  
Q.3. Write down the three states of equilibrium. Give example of each.

### Solved examples: 6.6

**Important Problems:** 6.4, 6.5, 6.6

## CHAPTER # 7 (CIRCULAR MOTION AND GRAVITATION)

- Q.1. Define centripetal acceleration. Derive the equation  $a_c = \frac{v^2}{r}$

Q.2. Define centripetal force. Derive the equation  $F_c = \frac{mv^2}{r}$

Q.3. What banking of a road? What is its advantages?

Q.4. By using Newton's law of gravitation, calculate the mass of the earth.

Q.5. Explain how value of "g" decreases with a change in the altitude.

Q.6. Derive an expression for the orbital velocity of an artificial satellite.

Q.7. How would the value of "g" and "G" be affected, if the mass of the earth becomes four times.

Q.8. Write down difference between "Centripetal force" and "Centrifugal force".

### **Important Problems: 7.3, 7.4, 7.6**

CHAPTER # 8 (WORK, POWER AND ENERGY)

- Q.1. Define positive, negative and zero work done.  
Q.2. Derive the relation between power and velocity.  
Q.3. Define kinetic energy. Derive the relation  $K.E = \frac{1}{2}mv^2$ .  
Q.4. What do you know about the interconversion of kinetic and potential energy.

**Important Problems:** 8.2, 8.3, 8.7, 8.8

## CHAPTER # 9 (SIMPLE MACHINE)



**Q.4.** Define wheel and axle. [1]

**Solved example: - 9.3, 9.6**

#### **CHAPTER 4.10 PROPERTIES OF MATTER**

- Q.1. State Archimede's Principle and its applications.  
Q.2. Explain Hook's Law applied the Helical spring.  
Q.3. Define surface tension, viscosity, Buoyancy.

Q.4. Define the following terms:

- (a) Elasticity      (b) Stress      (c) Strain
- (d) Elastic Limit      (e) Yield point

Q.5. Define Young's modulus of Elasticity. Derive its equation.

Q.6. State and explain Pascal's law.

**Solved examples:** 10.3, 10.5

**Important Problems:** 10.4, 10.5, 10.7, 10.8

### CHAPTER # 11 (HEAT)

Q.1. Linear and volumetric expansion of solid. Relation between coefficient of linear and volumetric expansion.  $\beta = 3\alpha$

Q.2. Define bimetallic strip. Write its application.

Q.3. State Boyle's law, and Charles's law. Derive General gas equation  $PV = nRT$ .

Q.4. State Law of Heat Exchange, Define Heat Capacity and Latent Heat.

Q.5. Define thermal conductivity. Derive its formula and write down the factors and units of thermal conductivity.

Q.6. Difference between:

- (a) Heat capacity and Specific heat capacity
- (b) Conduction and Convection

**Solved example:** 11.3, 11.8, 11.11

**Important Problems:** 11.1, 11.6 11.7, 11.9

### CHAPTER # 12 (WAVES AND SOUND)

Q.1. Define the following:

- (a) Wave      (b) Wave motion      (c) Oscillation or Vibration
- (d) Oscillatory or Vibratory motion      (e) Periodic motion
- (f) Displacement      (g) Amplitude      (h) Time period
- (i) Frequency      (j) Wave length

Q.2. Define simple harmonic motion. Write down its conditions and give some examples.

Q.3. Prove that the motion of a body attached with a spring and placed on a smooth surface is simple harmonic motion.

Q.4. Write down the formula for the time period of simple pendulum and vibrating mass attached to the spring.

Q.5. Define simple pendulum. Prove that the motion of simple pendulum is S.H.M.

Q.6. (a) Define reflection of waves.

(b) What do you understand by interference of waves?

(c) What do you understand by constructive and destructive interference?

Q.7. Define interference of sound. Explain its two types.

Q.8. Define ultrasonic waves. Write down its characteristics and applications.

Q.9. Difference between:

- (a) Musical Sound and Noise
- (b) Transverse Waves and Longitudinal Waves

**Important Problems:** 12.3, 12.5, 12.6, 12.7, 12.8

### CHAPTER # 13 (PROPAGATION AND REFLECTION OF LIGHT)

Q.1. Differentiate between.

- (a) Real and Virtual image.      (b) Concave Mirror and Convex Mirror.
- (c) Regular reflection and Irregular reflection.

Q.2. Show by a ray-diagram, the formation of image by a plane mirror and write characteristics of the image.

Q.3. Define the following terms:

- |                  |                   |                   |            |
|------------------|-------------------|-------------------|------------|
| (a) light        | (b) ray of light  | (c) beam of light | (d) medium |
| (f) rarer medium | (g) denser medium |                   |            |

Q.4. Write down the construction and working of the pinhole camera.

Q.5. Define the following terms:

- |                         |                              |                         |
|-------------------------|------------------------------|-------------------------|
| (a) Mirror              | (b) Plane mirror             | (c) Incident ray        |
| (d) Angle of incidence  | (e) Normal                   | (f) Reflected ray       |
| (g) Angle of reflection | (h) Point of incidence       | (i) Centre of curvature |
| (j) Radius of curvature | (k) Pole or vertex           | (l) Principle axis      |
| (m) Focal length        | (n) Principle Focus or focus |                         |
| (o) Aperture            |                              |                         |

Q.6. Derive the mirror equation or mirror formula  $\frac{1}{f} = \frac{1}{p} + \frac{1}{q}$

**Important Problems:** 13.1, 13.4, 13.5, 13.6, 13.7

#### CHAPTER # 14 (REFRACTION OF LIGHT AND OPTICAL INSTRUMENTS)

Q.1. Define Power of Lens, Critical Angle, Refractive Index.

Q.2. Define Linear Magnification, Snell's Law, Refraction of Light.

Q.3. Draw a ray diagram of a compound microscope and simple microscope and write its working and construction.

Q.4. Define Total Internal Reflection of light with the help of ray diagram and write necessary condition for it.

Q.5. Thin lens formula  $\frac{1}{f} = \frac{1}{p} + \frac{1}{q}$

Q.6. Define the following terms:

- |                  |                       |                       |
|------------------|-----------------------|-----------------------|
| (a) Incident ray | (b) Refracted ray     | (c) Point of Incident |
| (d) Emergent ray | (e) Angle of Emergent |                       |

Q.7. Explain the defects of vision, their causes and how they can be corrected.

Q.8. Differentiate between:

- |  |  |
|--|--|
| (a) Compound Microscope and Astronomical Telescope |  |
| (b) Reflection and Refraction                      |  |

**Solved example:** 14.4, 14.6, 14.10

**Important Problems:** 14.2, 14.3, 14.4, 14.5, 14.7

#### CHAPTER # 15 (NATURE OF LIGHT AND ELECTROMAGNETIC SPECTRUM)

Q.1. Define Quantum Theory and Explain Dual nature of light.

Q.2. Which waves are there in the spectrum of electromagnetic radiation and what are their frequency?

Q.3. Difference between: Wave theory and Corpuscular theory

#### CHAPTER # 16 (ELECTRICITY)

Q.1. What are the factors on which the capacity of a capacitor depends.

Q.2. Define resistance and its unit. What are the factors on which it depends?

Q.3. State ohm's law. Derive the equation  $V = IR$ .

- Q.4. With the help of a circuit diagram, derive the expression  $\frac{1}{R_e} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots$ . When resistors are connected in parallel.

Q.5. Find the relation between power, voltage and current.

Q.6. Difference between: Alternating current and Direct current.

**Solved example**      16.3, 16.6, 16.11, 16.14

**Important Problems:** 16.1, 16.3, 16.5, 16.6

CHAPTER # 17 (MAGNETISM AND ELECTROMAGNETISM)

- Q.1. Draw a labelled diagram of an electric bell and write down its working.

Q.2. What is Galvanometer? How is it converted into Ammeter and Voltmeter?

Q.3. Define the following terms:

(a) Magnetic poles	(b) Magnetic force
(c) Magnetic field	(d) Magnetism

Q.4. Explain the different methods of making magnet.

Q.5. What is a solenoid? What do you understand by magnetic field due to a coil or solenoid?

Q.6. Explain the direction of the force experienced by the current carrying conductor in a uniform magnetic field.

Q.7. Write down the construction and working of simple electric motor.

## CHAPTER # 18 (ELECTRONICS)

- Q.1. Define Doping and Rectifier.

Q.2. What is Radar? Write three uses of Radar.

Q.3. Write down the construction of transistor and describe its function as an amplifier or describe two types of transistor with the help of a diagram and two advantages.

Q.4. How can a *p-n* junction diode be used as a half wave and full wave rectifier?

Q.5. Write down the advantage and uses of transistors.

Q.6. What is an Amplifier? How can a transistor act as an amplifier and a switching device?

Q.7. Differentiate between:

  - (a) *p*-type substance and *n*-type substance
  - (b) Forward biased and Reverse biased

## CHAPTER # 19 (NUCLEAR PHYSICS)

- Q.1.** Define Half Life of Radioactive Elements, Radioactivity, Nuclear Reactor, Chain Reaction  
**Q.2.** Define nuclear fission with the help of equation.  
**Q.3.** Differentiate between Fission & Fusion reaction.  
**Q.4.** Define Isotopes with its uses.

**Important Problems:** 19.2, 19.3, 19.4, 19.5

# آدم جی کو چنگ سینٹر

تیاری پیپر برائے امتحانات ۲۰۱۸-۲۰۱۷

اردو (لازی)۔ جماعت دہم

## اہم سوالات برائے حصہ ب (مختصر جواب کے سوالات)

اہم سوالات برائے سوال نمبر۔

- (i) بوڑھا ہے ماضی پر کیوں افسوس کر رہا تھا؟
- (ii) آنکھ مکھنے پر لڑکے نے کیا فیصلہ کیا؟
- (iii) سبق "گزر اہواز مان" میں صفت نے قوم کے فوجوں کو کیا صحیح کی ہے؟
- (iv) محمود غزنوی نے "تارہ گڑھ" کے قلعے پر حملہ کیوں نہیں کیا؟
- (v) محمود غزنوی کو اس کے ایمان حکم کا کیا صلطا؟ نیز محمود غزنوی نے اپنے شکر کے جانبازوں سے مقاطب ہو کر کیا کہا؟
- (vi) جب محمود غزنوی موناچوں کا بات توڑنے لگا تو وہ بخاریوں نے اسے کیا کہا اور محمود نے انہیں کیا جواب دیا؟
- (vii) حسن بیہدی کوں تھا؟ اور اس نے محمود غزنوی کی خدمت میں کیا عرض کی؟
- (viii) حضرت عائشہؓ نے حضور اور علیؑ کے اخلاق کے متعلق کیا شہادت دی ہے؟
- (ix) قرآن پاک نے رسول کریم ﷺ کے اخلاق کے متعلق کیا شہادت دی ہے؟
- (x) رسول اکرم ﷺ نے عورتوں کے مرتبے کو بلند کرنے کے لئے کیا ارشاد فرمایا؟
- (xi) رسول اکرم ﷺ کی تھاوت اور فیض کا کوئی واقعہ لکھی۔
- (xii) ہمارے الاؤسوں کوں تھا؟ اور رسول کریم ﷺ نے اس کے ساتھ کیا سلوک کیا؟
- (xiii) شخص کی درسگاہوں میں کوئی کوں کوں سے مضمانت پر حاصل کرتے تھے؟
- (xiv) سندھ کے علم و فضل کے بارے میں ہمیں نے کیا لکھا ہے؟
- (xv) دنیا میں قومیت کی تخلیل کے دو بنیادی نظریے کوں سے ہیں؟
- (xvi) مسلمانوں کی قومیت ایک نظریاتی قومیت کیوں ہے؟
- (xvii) پاکستان میں کوئی علاقائی زبانیں بولی جاتی ہیں؟ نیز علاقائی زبان کی موجودگی میں قومی زبان کی کیا اہمیت ہے؟
- (xviii) پہنچنے نے خال صاحب پر ڈگری کیوں جاری کروائی؟
- (xix) علیم نے غریب خاندان کی کس طرح مدد کی؟ اور پہنچنے کے ظلم و تم مظلوم خاندان کو نجات والا کریم نے کیا محسوس کیا؟
- (xx) توصیف نے خواب میں کیا دیکھا؟ تو صیف کو غریب مررت کے دھکا احساس کہ ہوا؟
- (xxi) توصیف نے اپنے سُر اور والوں کا دل کس طرح بھیتا؟
- (xxii) بستی کوں تھا؟ اس نے شاہی خاندان کے افراد کی کس طرح مدد کی؟
- (xxiii) کلثوم زمانی یہ گم کے رخصت ہوتے وقت بادشاہ نے کیا دعا مانگی؟
- (xxiv) نواب نور محل نے خواب میں کیا دیکھا؟
- (xxv) کم نظر لوگ اکثر سید احمد خان پر تحقیر کیوں کرتے رہتے تھے؟
- (xxvi) زیر کوں تھا؟ اور اس نے کیا جرم کیا تھا؟
- (xxvii) عبدالقدوہ کو یہ تین کیوں تھا کہ زیر کو چانسی نہیں دی جاسکتی؟
- (xxviii) جمن میں اردو زبان کی تبلیغ کا اندازہ کن باتوں سے لگایا جاسکتا ہے؟
- (xxix) سریدا احمد خان کی زندگی سے ہمیں کیا سبق ملتا ہے؟ نیز سریدا احمد خان نے اسلام کے لئے کیا نظر خدمات انجام دیں؟

- (xxx) سریعہ احمد خان کی زندگی دل کا کوئی ایک واقعہ بیان کریں۔  
 (xxxi) مولوی نبیر احمد نے اپنے بیٹے شیر احمد کو خط میں کیا تصحیح کی ہے؟  
 (xxxii) ہائل کی زندگی سے متعلق آپ کا کیا خیال ہے؟  
 (xxxiii) کیا معاشرے کا بھاڑک ٹھارے انفرادی عمل سے رُک جائے گا؟ چند جملوں میں لکھیے۔  
 (xxxiv) بستی کو خوب صورت اور خوشحال بنانے کے لیے خواتین نے کس طرح محنت کی؟  
 (xxxv) الل تعالیٰ کس قوم کی حالت بدلتا ہے؟  
 (xxxvi) حضرت شاہ ولی اللہ کی تحریک کے اہم مقاصد قریب کیجئے۔  
 (xxxvii) سعادت کا پیشگز طرح خدمتِ علم سے عبارت ہے؟

مرکزی خیال یا خلاصہ کے لئے اہم اسماق برائے سوال نمبر ۳۔

پہلا قدم شرط ہے، پچھی ہمدردی، سونا تھوکی فتح، حضور اکرم ﷺ کے اخلاق، نظریہ پاکستان، توصیف کا خواب، بیت پہاڑ شاہ، قرطبہ کا قاضی

مرکزی خیال یا خلاصہ کے لئے اہم مخصوصات برائے سوال نمبر ۴۔

ہنس نام، برسات، جنگ برموک کا ایک واقعہ، محنت اپنی آن، صحیح کا سماں، دنیوں میں رحمتِ اقبال پانے والا، حمرا کی دعا

توتریں کے لئے اہم اشعار برائے سوال نمبر ۵۔

- آخراں درد کی دوایا ہے  
 جب تک بس جل سکے، ساغر پڑے  
 ایسا پچھ کر کے چلو یاں کہ بہت یا اور ہو  
 لطف کیا سرو کی مانند گزار آزاد ہو  
 حضور شمع پر وازوں کی نادانی نہیں جاتی  
 اک تہذیب فنا ہوتی ہے  
 ہر کام سے غرض ہے انسیں کی رضا بھجے  
 پڑھی اپنی برائیوں پر جو نظر تو نکاہ میں کوئی براندہ با  
 کہ تیری سلطنت ہے جادو اپنی  
 مگر خود ناظرِ مظہور ہے تو  
 نہیں و آسمان کا نور ہے تو  
 وہ چاہے تو عزت، وہ چاہے تو ذلت  
 دیکھی نہیں کسی نے اگر شانِ مصلحتی ﷺ
- (i) دل ہاداں تجھے ہوا کیا ہے  
 ساقیاں لگ رہا ہے جل چلاو  
 پارے دنیا میں رہو گم زدہ یا شاد وہ ہو  
 عشق مجھ کی طرح حسین گرفتاری ہے  
 جلے جاتے ہیں بڑھ کر، منے جاتے ہیں گر گر کر  
 اک نیا دور جنم لیتا ہے  
 ہر بات میں انسیں کی خوشی کا رہا خیال  
 نہ چھی حال کی جب ہمیں اپنے خبر ہے دیکھتے اور وہن کے عیب وہر  
 مسلم ہے تجھی کو بخراں  
 زمین و آسمان کا نور ہے تو  
 وہ چاہے تو عزت، وہ چاہے تو ذلت  
 دیکھی نہیں کسی نے اگر شانِ مصلحتی ﷺ

اہم خطوط اور مراسلمے برائے سوال نمبر ۶۔

- (i) اپنے دوست کو خط لکھیے جسیں پاکستان کے موجودہ حالات میں تو ہی خدمت کی ضرورت و اہمیت بیان کیجیے۔  
 (ii) اپنے دوست کو خط لکھیے جسیں کسی ایسی کتاب کا تمد کرہ ہو جیسے آپ نے پڑھا اور پسند کیا۔  
 (iii) اپنے چھوٹے بھائی کو خط لکھیے اور اسکو تعلیم کی اہمیت سمجھاتے ہوئے بتائیے کہ احتجان کی تیاری کس طرح کرنی چاہیے۔  
 (iv) کسی اخبار کے مدد و کور اسلام لکھیے جس میں مزدوروں کی ثبوت پھوٹ اور زیریک کی بدانشگاہی سے متعلق سوال کی جانب توجہ مبذول کرائیے۔  
 (v) کسی اخبار کے مدد و کور اسلام لکھیے جس میں پاکستان میں بھل گیس کی کمی کے حوالے سے تشویش کا اطمینان کرتے ہوئے تو اتنا کے محاذ کے خاتمے کے لئے تجدیز دیجیے۔  
 (vi) کسی اخبار کے مدد و کور اسلام لکھیے جس میں پاکستان میں بڑھتی ہوئی دہشت گردی پر تشویش کا اعتماد کرتے ہوئے مسئلے کے حل کے لئے تجدیز دیجیے۔

سوال نمبر ۷: (تو اور)

- (الف) الفاظ کے مترادف تحریر کیجئے۔ (ب) الفاظ کے متناقض تحریر کیجئے۔ (ج) مادرات کے جملے۔  
 (د) واحد کی جمع اور جمع تحریر کیجئے۔ یا واحد کی جمع اور جمع کے واحد بنائیے۔ (و) مُثُر کے مصفر اور مصفر کے مُثُر تحریر کیجئے۔

### اہم سوالات برائے حصہ ج (تفصیلی جواب کے سوالات)

تشریع کے لئے اہم شرپارے برائے سوال نمبر ۸۔

- (مرید احمد خان صفحہ ۱۰۳)  
 (گزراہواز ماں صفحہ ۸۹)  
 (سوناتھ کی فتح صفحہ ۲۰-۲۱)  
 (رسول اکرم ﷺ کے اخلاق صفحہ ۲۸)  
 (سنده میں علم و فضل صفحہ ۳۵-۳۶)  
 (نظریہ پاکستان صفحہ ۳۳)  
 (اردو اور علاقوائی زبانیں صفحہ ۵۰)  
 (چی ہمدردی صفحہ ۵۸)  
 (چی ہمدردی صفحہ ۵۵)  
 (توصیف کا خواب صفحہ ۵۹)  
 (توصیف کا خواب صفحہ ۶۰)  
 (بنت بہادر شاہ صفحہ ۱۴)  
 (اوپیوں کے خطوط صفحہ ۱۰)  
 (اوپیوں کے خطوط صفحہ ۱۰۹)  
 (اوپیوں کے خطوط صفحہ ۱۰۸)  
 (اوپیوں کے خطوط صفحہ ۱۰)
- (i) اس نے ایک مایوس اور افسردہ ایسی چیز مرد نے رکھی تھی۔  
 (ii) ایسی حالت میں اس کے دل کو پاش پاش کرتا تھا۔  
 (iii) اسے مسلمانوں ایسا نہیں۔ بہشت میں داخل ہو۔  
 (iv) تم سے پہلے کی قومیں اس کے بھی ہاتھ کاٹنے جاتے۔  
 (v) ایسے لوگ بھی یقیناً کیا جاندے کہ فرمائے۔  
 (vi) مسلمانوں کی قومیت خلطے کے لوگوں کے لیے جگہ ہوتی ہیں۔  
 (vii) زبانیں بھی بول چال۔ یا گفتگی علامت ہوتی ہیں۔  
 (viii) اس نے جو اتنی احسان مندی زمین میں گڑا جاتا تھا۔  
 (ix) یہ سن کر تمام خاندان کوئی یہود مرشد۔  
 (x) مردانے میں نکاح۔ مخدحہار میں ڈوبی۔  
 (xi) سُسرال پُچیں تو۔ ہوئی ترکی تھی۔  
 (xii) "خداؤند ایبے وارث۔ پریشانیوں سے نجات دے۔"  
 (xiii) یہی فیض میں لیکن اسے کوئی نہیں دیکھتا۔  
 (xiv) اگر تھماری طرح مجھ کو۔ اقران و امثال میں متاز ہو۔  
 (xv) نوکری اور رزق تو مقدر ہے مگر۔ اور انہاں شہین کی حق ہیں۔  
 (xvi) کاتب بے نکلی یا بے خیال میں پچھا کا پچھا۔ دیک کی آنکھوں سال کی غذا کے لیے رکھ جائے۔

تشریع کے لئے اہم جملے۔

- خدا کا اصلی گھر تو پھرے ہوئے گلیم کی ماں کا دل تھا۔  
 (i) ایسے شوہر کے دل میں گھر کرنا لو بے کوڑ ماں اور پھر کو جو رک گانا تھا۔  
 (ii) میری یو روگی زبان سے اللہ تعالیٰ کا غور حرم کی باریوں لیکن اس نے سنتے والے کتابوں کو ہمراپا یا۔  
 (iii) ابھی! آج کا آنکاب یہ کیا دیکھ دے ہے! آج کی روشنی میں یہ کیا ہو رہا ہے؟  
 (iv) میرے نزوں کیک نہ فروش نام پانے سے نہ ٹکن ہونا بہتر ہے۔  
 (v) شام نے آکر انہیں کی بیر بیچ میں رکھ دی۔  
 (vi) بھائیو! اس دن کے لیے مالاں کر رکھو۔  
 (vii) رزق کے اچھی طرح ملنے کا شکر چاہیے، کی کا شکوہ کیا۔  
 (viii) میرے اعمال کی شامت سے ان کو سواند کر۔  
 (ix) ہائل میں جسے دیکھو، جو علوم میں خوطر زدن نظر آتا ہے۔  
 (x) ان گلی ہڈیوں میں سے ایسی محبت کا دیکھنا اس کے دل کو پاش پاش کرتا تھا۔  
 (xi) انسان کی لیکنی لیکنی چیز ہے جو آخر کم رہتی ہے۔  
 (xii) اسلاف کی کتابوں کو بے دردی سے لادیا اور جواہرات کو کوڑیوں کے مول فروخت کر دیا۔  
 (xiii) اتنی دور ایک مختلف تہذیب کے ملک میں اور وہ کے پودے کو بھولتے بھلتے دیکھنا واقعی ایک جذباتی تحریر تھا۔  
 (xiv)

- پھر اندر جیرا تنا ہے کہ ہر تاریک گوئے کوش کی ضرورت ہے۔ (xv)
- ان اُن وقیعہ میں انہوں کو پیٹ سہیت کر دھنا اب جیرا پہنچا۔ (xvi)
- مال بآپ دل تھی دل میں اسی کی بلا کمی لیتے گئے۔ (xvii)
- چلوتو سارے زمانے کو ساتھ تکرچلو (xviii)
- مشرق کا شہر سارے ستاروں کی فوج کو شکست دے کر شعاع کانیزہ ہاتھ میں لیے گئا۔ (xix)
- حرکت میں برگت ہے۔ (xx)
- درو دیوار سے حضرت برستی تھی۔ (xxi)
- دیکھا تو یہی دیکھا کہ فوج کا دل با دل چھا گیا ہے اور نشانِ محمودی لبرار ہا ہے۔ (xxii)
- قصر پاکستان کی نیا وہ میں پہلی اینٹ اسی پر مردنے رکھی۔ (xxiii)
- ہمدرمند انسان اللہ کا دوست ہے۔ (xxiv)
- معالقہ قظم جس طرح احباب میں رسم ہے وہ صورتِ ملاقات کی ہے۔ (xxv)
- حقیقت اور احتجاج میں جو ہمود پیدا ہو گیا تھا اسے توڑا۔ (xxvi)
- لیافتِ عجب چیز ہے۔ ساری عمر آدمی کو سرت دینے والی چیز، سُر اور دوہوں میں لیافت ہے۔ (xxvii)

تفریخ کے لئے اہم بند رائے سوال نمبر ۹۔

- (i) جواب شکوہ (تمام بند)      (ii) صحیح کام (تمام بند)      (iii) وہ نبیوں میں رحمتِ لقب پانے والا (تمام بند)

اہم مضامین برائے سوال نمبر ۱۰۔

- (i) سائنس رحمت بھی زحمت بھی اور بوجد یہ کی کمیں اور اسکے نتھاں  
اسلام کی برکتیں
- (ii) میڈیا آزاد، نسل بر باد
- (iii) سُکب خانوں کی اہمیت و فادیت
- (iv) ضرورتِ ایجاد کی مال ہے
- (v) میری زندگی کا ہے قابل فراموش واقعہ ایک افسوس ہا ک واقعہ
- (vi) میرا پسندیدہ مشکلہ
- (vii) خدمتِ علم میں عمارت ہے
- (viii) محنت زندہ قوموں کی ہے پیچاں امحنت میں عظمت
- (ix) قوی اتحاد
- (x) ایک تفریخ ستر کی روادا کسی تاریخی مقام کی سیر
- (xi) عمل سے زندگی بنتی ہے جنت بھی جنم بھی اچھی آرزوں سے تقدیر نہیں بدلتی
- (xii)

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

BOTANY – XI

**Important Information:****Information for MCQs (Section - A)**

It is not possible important MCQs but for the Preparation of MCQs read your syllabus book, Attempt all MCQs of last 25years and do preparation of all MCQs which are provided by your teacher.

**CHAPTER NO:4 (The Cell)****Short Questions/Answers**

Techniques to isolate component of cell, Cell Wall, Eukaryotes and Prokaryotes, Cytoskeleton. Plastids, Mitochondria . lysosomal storage disease , Nucleus, Endoplasmic reticulum.

**CHAPTER NO:5 (Variety of Life)****Short Questions/Answers**

Define species, Nomenclatures , Write down the classification of Wheat, Viroids and Prions, Hepatitis., AIDS

**Detail Questions/Answers**

Bases of classification, Classification of virus (Eight Groups)

**CHAPTER NO:6 (The Kingdom Prokaryote)****Short Questions/Answers**

Diagram of Bacilli Bacteria, Types of Bacteria (Shapes)Nutrition in Bacteria, Importance of bacteria, Diagram Nostoc Morphology, Reproduction in Nostoc.

**CHAPTER NO:7 (The Kingdom protocista (Protista))****Short Questions/Answers**

Life Cycle and Importance of Phytophthora infestant.

**Detail Questions/Answers**

Life Cycle of ulva.

**CHAPTER NO:8 (The Kingdom Fungi)****Short Questions/Answers**

Importance of Fungi, Lichens, Yeast, Deuteromycota.

**Detail Questions/Answers**

Life Cycle of Basidiomycota.

**CHAPTER NO:9 (The Kingdom Plantae)****Short Questions/Answers**

Draw V.S of selaginella strobilus, Draw L.S of Male/Female, Cone of Pinus, Rhynia Evolution of leaves and seed. Economics importance of family Solanaceae and Poaceae.

**Detail Questions/Answers**

Adaptations to land habitat, Life Cycle Of fern Family Solanaceae , Rosaceae.

**CHAPTER NO:11 (The Bioenergetics)**

**Short Questions/Answers**

Role of Water, Light and CO<sub>2</sub> in Photosynthesis, Four events during light dependent reaction, Pyramid of energy.

**Detail Questions/Answers**

Kreb's Cycle, Light dependent reactions of Photosynthesis, Fixation of CO<sub>2</sub> during Benson and Calvin Cycle.

**CHAPTER NO:12 (The Nutrition)**

**Short Questions/Answers**

Role and deficiency symptoms of Phosphorous and Magnesium, Carnivorous Plant.

**CHAPTER NO:14 (Transport)**

**Short Questions/Answers**

Facilitated diffusions, Diagram Pathway for water uptake by the root up to xylem, mechanism opening and closing of stomata,

**Detail Questions/Answers**

Water minerals uptake by root,

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

XI - Chemistry

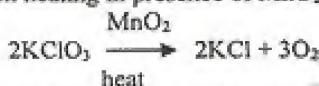
**CHAPTER NO. 1****(Introduction to Fundamental Concepts of Chemistry) :**

- Differentiate between:  
\* Systematic error and Random error      \* Significant figures and Exponential notation
- Calculate mass, number of moles, number of molecules and volume of  $\text{CO}_2$  gas produced at S.T.P by complete combustion of 0.01g graphite.  $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$
- An organic compound contains carbon, hydrogen and oxygen. 0.94g of this compound gives 1.32 g of  $\text{CO}_2$  and 0.568g of  $\text{H}_2\text{O}$ . Its molecular mass was found to be 180. Determine its molecular formula.
- 1.0 g of an organic substance was burnt in excess of air to yield 3.03 g  $\text{CO}_2$  and 1.55 g of  $\text{H}_2\text{O}$ . If the molecular mass of the compound is 58, find its molecular formula?
- The atomic weight of gold is 197.2 a.m.u  
(i) What is the weight of one gold atom  
(ii) How many atoms are there in 3.29 g of Au  
(iii) How many gram atoms are in 7.5 g of Au.
- Reduce the following values into four, three and two significant figures; (i) 9.8576 (ii) 30.925
- $\text{NaHCO}_3$  is obtained in ammonia-solvent process when  $\text{NH}_3$  and  $\text{CO}_2$  gases are passed into aqueous solution NaCl.



How many  $\text{dm}^3$  of  $\text{NH}_3$  are required to produce 212 g of  $\text{NaHCO}_3$ .

- Calculate the volume of oxygen at S.T.P that may be obtained by complete decomposition of 51.3 g  $\text{KClO}_3$  on heating in presence of  $\text{MnO}_2$  as a catalyst.



- 54 gm of dinitrogen pentoxide ( $\text{N}_2\text{O}_5$ ) is decomposed on heating as  $2\text{N}_2\text{O}_5 \longrightarrow 4\text{NO}_2 + \text{O}_2$ . Find the volume of  $\text{NO}_2$  and  $\text{O}_2$  at S.T.P
- Express the following as power of 10:  
(i) 5000 (ii) 53.24 (iii) 0.00005 (iv) 54321
- Calculate the number of moles and number of molecules present in 9.0 g of  $\text{C}_6\text{H}_{12}\text{O}_6$ .
- You are provided with 6.0 g C and 100 g of  $\text{O}_2$ . Calculate the amount of  $\text{CO}_2$  prepared by reacting them. Which of them is the limiting reactant.
- How many significant figure are there in 732.020? Convert it to three and two significant figure.

**CHAPTER NO. 2 (Three States of Matter):**

- Write main postulates of Kinetic Molecular Theory of gases. How it explains the following properties of gases: \* Diffusibility \* Compressibility \* Expansion
- State and explain Boyle's law, Charle's law and Graham's law of diffusion.
- Derive General gas equation. Values and units of gas constant 'R'.
- Give a brief account on: \* Viscosity \* Surface tension \* Vapour Pressure \* Types of Crystals
- Differentiate between:  
\* Isomorphism and Polymorphism \* Ideal gases and Real gases
- Give reason why?  
\* Evaporation is a cooling process. \* Viscosity is decreased by increase in temperature.  
\* Liquid rises in capillary tube. \* Among three states of matter gases diffuse fastest.  
\*  $\text{NaCl}$  and  $\text{MgO}$  are isomorph. \* Glycerine is distilled at reduced pressure.  
\* Pressure cooker is used for rapid cooking. \* A falling drop of a liquid is spherical.
- Why real gases deviate from the ideal behaviour? And give condition for ideal behaviour of real gases.
- A 5.0 liter vessel contains 2.0 gm hydrogen and 28.0 gm of nitrogen at  $27^\circ\text{C}$ . Find the total pressure of the mixture of gases.
- The volume of oxygen gas collected over water at  $24^\circ\text{C}$  and 672 mm Hg pressure is 128 ml. Calculate the mass (in gm of  $\text{O}_2$  gas obtained). The vapour pressure of water at  $24^\circ\text{C}$  is 22 mm.
- A 100  $\text{cm}^3$  gas cylinder filled with chlorine under 160 torr pressure is connected by stop-cock with another cylinder of 400  $\text{cm}^3$  filled with nitrogen under pressure of 200 torr. What will be the total pressure when stop-cock is opened?
- Correct the following statements, giving the names of the respective laws or principles:  
(i) The volume of a gas at  $27^\circ\text{C}$  doubles at  $54^\circ\text{C}$ .  
(ii)  $\text{H}_2$  gas (mol. Mass=2) takes more time to diffuse than  $\text{O}_2$  gas (mol. Mass=32)

**CHAPTER NO. 3 (Atomic Structure):**

1. What is Radioactivity? Discuss properties of each type of radioactive ray.
2. What do you understand by electronic configuration? Write electronic configuration of the elements having atomic number:  
\* 9      \* 13      \* 19      \* 24      \* 29      \* 36      \* 55
3. Differentiate between the following:
 

(i) Lyman and Balmer series	(ii) Cathode and Canal rays
(iii) Continuous spectrum and line spectrum	(iv) Electronegativity and Electron Affinity
(v) Natural radioactivity and Artificial radioactivity	
4. Write a note on (a) Quantum Numbers
5. What happens when a high voltage current is applied between two electrodes and separated by a gas at a pressure of 0.001 mm of Hg.

**OR**

Describe Crook's tube experiment about the discovery of cathode particles write down characteristics of cathode particles.

6. What are the weakness of Rutherford's atomic model?
7. Differentiate between the following:
 

(i) Principle quantum number and Azimuthal quantum number	(ii) Cathode rays and X-rays.
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8. What rules and principles are violated in the following electronic configuration:
 

(i) IS <sup>2</sup> 2S <sup>3</sup>	(ii) IS <sup>2</sup> 2P <sup>2</sup>
(iii) IS <sup>2</sup> 2S <sup>2</sup> 2P <sup>6</sup> 3S <sup>2</sup> 3P <sup>6</sup> 3d <sup>4</sup> 4S <sup>2</sup>	(iv) IS <sup>2</sup> 2S <sup>2</sup> 2P <sup>6</sup> 3S <sup>2</sup> 3P <sub>x</sub> <sup>2</sup> 3p <sub>y</sub> 3p <sub>z</sub>
9. Starting from K.E=1/2 mv<sup>2</sup> and P.E=Ze<sup>2</sup>/r derive an expression for energy of an electron in n<sup>th</sup> orbit.

**OR**

Derive expressions of Radius, Energy, frequency and wave number of electron which revolves in an orbit "n".

10. Make the correct sequence of the orbitals for the electronic configuration according to (n+1) rule 4p, 4s, 3d, 5s, 5p.
11. Calculate the wave number of radiation emitted in Lyman series of hydrogen atom when electron jumps from 2<sup>nd</sup> to 1<sup>st</sup> orbit ( $R_H = 109678 \text{ cm}^{-1}$ )
12. What are the shape of orbitals for which l = 0 and 1?
13. What is the relationship between X-Rays and Atomic No.?

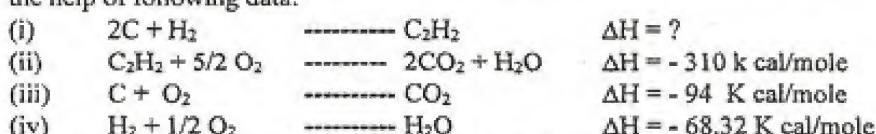
**CHAPTER NO. 4 (Chemical Bonding):**

1. Differentiate between the following:
 

* Ionic bond and Covalent bond	* Polar bond and non-polar bond
* Bonded pair and lone pair	* Atomic orbitals and Molecular orbitals
2. What is a chemical bond? How ionic bond is formed in NaCl with respect to energy changes.
3. Give scientific reasons:
  - (i) Why H-Cl has polar bond while Cl-Cl is non-polar bond?
  - (ii) Why a polar bond is stronger than non-polar bond?
  - (iii) Why CO<sub>2</sub> is polar molecule but it has zero dipole moment?
4. Explain the geometry of BeCl<sub>2</sub> and H<sub>2</sub>O molecules on the basis of hybridization and electron pair repulsion theory.
5. What do you mean by hybridization of atomic orbital?
6. Differentiate between:
  - (i) Bonding molecular orbital and Anti bonding molecular orbital
  - (ii) Sigma bond and Pi bond.
7. Give the main features of electron pair repulsion theory and explain the shape of the following molecules:
  - (i) CH<sub>4</sub>    (ii) H<sub>2</sub>O    (iii) BF<sub>3</sub>    (iv) BeCl<sub>2</sub>    (v) NH<sub>3</sub>
8. Explain dipole moment, predict the dipole moment of CO<sub>2</sub> molecule.
9. Define orbital hybridization, Describe SP<sup>3</sup> hybridization.
10. Differentiate any two of the following:
  - (i) SP<sup>2</sup> hybridization and SP<sup>3</sup> hybridization
  - (ii) Sigma bond and Pi bond
  - (iii) Polar covalent bond and Non polar
11. Define dipole moment, which of the following molecules possesses dipole moment.
  - (i) PCl<sub>3</sub>    (ii) CS<sub>2</sub>    (iii) H<sub>2</sub>S    (iv) CCl<sub>4</sub>
12. What is coordinate covalent bond? Explain the formation of POCl<sub>3</sub> molecule.
13. Give scientific reasons for any three of the following:
  - (i) Graphite is very soft whereas diamond is very hard.
  - (ii) Phosphorous combine with Chlorine to form PCl<sub>5</sub> but it does not form PI<sub>5</sub> with iodine.
  - (iii) The boiling point of a liquid remains constant although the heat is constantly supplied to the liquid.

**CHAPTER NO. 5 (Energetics of Chemical Reaction):**

1. Explain Pressure-Volume work on the basis of the First law of Thermodynamics.
2. Differentiate between:
  - (i) System and Surroundings
  - (ii) Intensive properties and Extensive properties
  - (iii) Exothermic and Endothermic reactions
3. State and explain First law of Thermodynamics and show that:  $\Delta H = \Delta E + P\Delta V$
4. Define heat of formation. Calculate the heat of formation of  $C_2H_2$  from carbon and hydrogen with the help of following data:



5. Calculate the heat of formation of  $N_2O_4$  from the following data:
 

(i)	$2NO_2$	-----	$N_2O_4$	$\Delta H = ?$
(ii)	$1/2N_2$	-----	$N O_2$	$\Delta H = +33.95 \text{ Kj/mole}$
(iii)	$N_2 + 2O_2$	-----	$N_2O_4$	$\Delta H = +9.3 \text{ Kj/mole}$
6. Determine  $\Delta H$  for the reaction:  

$$2Na + H_2O + 1/2 O_2 \quad ----- \quad 2NaOH \quad \Delta H = ?$$

From the following data:

Na	+ 1/4 $O_2$	-----	1/2 $Na_2O$	$\Delta H = -50 \text{ k.cal}$
$Na_2O$	+ $H_2O$	-----	2 $NaOH$	$\Delta H = -56 \text{ k.cal}$
7. A system absorbs 200J of heat from surroundings and does 120J of work on the surrounding by expansion. Find the internal energy of the system.
8. When 5400J of heat is added to the system of a gas at a constant pressure, its internal energy increase by 1000J. Calculate change in volume of system.
9. 3600kj heat is entered in a gas cylinder. Calculate the value of  $\Delta E$ :
  - (i) If the volume is kept constant
  - (ii) If the volume is not constant, work of -800kj was performed by gas
  - (iii) If the gas is allowed to expand, the value of work is +5200kj.
10. In certain process 700J heat are absorbed by a system, while 300J work is done one the system. What is the change in the internal energy of the process?
11. 600J of heat was given to a gas at  $1.01 \times 10^5 \text{ N/m}^2$  pressure. The internal energy was increased by 300J. Find the increase in volume.

**CHAPTER NO. 6 (Chemical Equilibrium):**

1. Differentiate between the following:
  - \* Reversible reactions and Irreversible reactions
  - \* Solubility and Solubility product
  - \*  $K_c$  and  $K_p$
2. State and explain Law of Mass action along with derivations of ' $K_c$ ' and ' $K_p$ '
3. State Le-chatelier's principle and discuss its industrial applications.
4. What is common ion effect? Give its application.
5. The solubility of  $BaSO_4$  is  $9.0 \times 10^{-3} \text{ g/dm}^3$ . Find the solubility product  $K_{sp}$ .
6. Three reactions of equilibrium have the values of  $K_c = 2.0 \times 10^{-5}$ , 0.013 and  $1.7 \times 10^{-10}$  which reaction give very little product and which goes to completion? Why?
7. Illustrate by calculation whether  $PbCrO_4$  would precipitate out if  $100 \text{ cm}^3$  of  $2 \times 10^{-4} \text{ M } Pb(NO_3)_2$  solution is mixed with  $300 \text{ cm}^3$  solution of  $K_2CrO_4$  concentration  $1.5 \times 10^{-8} \text{ M}$  ( $K_{sp} = 1.8 \times 10^{-14}$ )
8. State the law of mass action and derive  $K_c$  for the general reversible equilibrium reaction  

$$aA + bB \quad ----- \quad cC + dD$$
9. Write down the equilibrium expression for the following reactions:
  - (i)  $2C + O_2 \quad = \quad 2CO_2$
  - (ii)  $N_2 + 3H_2 \quad = \quad 2NH_3$
  - (iii)  $CH_3COOH + C_2H_5OH \quad = \quad CH_3COOC_2H_5 + H_2O$
10. At equilibrium, a vessel of  $12 \text{ dm}^3$  a city contain 0.21 mole of  $PCl_5$ , 0.32 mole  $PCl_3$  and 0.32 mole of  $Cl_2$ . Calculate the value of  $K_c$  for the reaction:  $PCl_5 \quad = \quad PCl_3 + Cl_2$
11. Should  $AgCl$  precipitate from a solution prepared by mixing  $400 \text{ cm}^3$  of 0.1 M  $NaCl$  and  $600 \text{ cm}^3$  of 0.03 M.  $AgNO_3$ ? ( $K_{sp}$  of  $AgCl = 1.6 \times 10^{-10} \text{ mole/dm}^3$ )
12. How  $K_c$  is used to predict the direction of reversible reaction.
13.  $K_c$  for a reaction is 0.0194 and the calculated ratio of the concentration of reactant and product is 0.0116. Predict the direction of reaction.
14. Predict the effect of change of temperature and pressure on the following equilibrium mixture;
  - (i)  $N_2 + 3H_2 \quad = \quad 2NH_3 + Heat$
  - (ii)  $H_2 + I_2 + Heat \quad = \quad 2H$
15. The equilibrium constant expression for a gaseous equilibrium:

$$K_c = \frac{[NO]^4 [H_2O]^6}{[NH_3]^4 [O_2]^5}$$

16. Consider the following equilibria and answer the questions given at the end:
- $3O_2 \rightleftharpoons 2O_3$   $\Delta H = \text{Positive}$
  - $H_2 + I_2 \rightleftharpoons 2HI$   $\Delta H = \text{Positive}$
  - $2SO_2 + O_2 \rightleftharpoons 2SO_3$   $\Delta H = \text{Negative}$
  - $CH_2=CH_2 + H_2 \rightleftharpoons CH_3-CH_3$   $\Delta H = \text{Negative}$
- \* What are the equilibrium constant expressions?  
\* In which direction does the equilibrium change if the temperature is raised?

### CHAPTER NO. 7 (Solution and Electrolytes):

- Write a note on:  
(i) Neutralization (ii) Indicator (iii) Buffer Solution
- Differentiate between the following:  
\* Molar solution and molal solution \* Hydration and Hydrolysis  
\* Electrolysis and Electrode Potential \* Valency and Oxidation Number
- Define oxidation number and determine oxidation number of:  
(i) N in  $NH_4NO_3$  (ii) O in  $OF_2$  (iii) P in  $PO_4^{3-}$  (iv) C in  $C_2H_2O_4$   
(v) Cl in  $HClO_3$  (vi) O in  $KO_2$  (vii) S in  $Na_2S_2O_3$   
(viii) Cl in  $Mg(ClO_4)_2$  (ix) Cr in  $Cr_2O_7^{2-}$  (x) Mn in  $KMnO_4$
- Balance the following chemical equations by ion electron method:  
(a)  $Cr_2O_7^{2-} + I_2 \rightarrow Cr^{+3} + IO_3^{-1}$  (Acidic)  
(b)  $MnO_4^- + SO_3^{2-} \rightarrow Mn^{+2} + SO_4^{2-}$  (Basic)  
(c)  $MnO_4^{-1} + Fe^{+2} \rightarrow Mn^{+2} + Fe^{+3}$  (Acidic)  
(d)  $NO_3^{-1} + H_2S \rightarrow NO + S$  (Acidic)
- What is electrode potential? Describe Standard Hydrogen Electrode (SHE). What is the potential assigned to it?
- What is electrolysis? Discuss electrolysis of  $CuCl_2$ .
- What is pH of  $10^{-4}$  molar HCl? Tell whether pH of  $10^{-4}$  molar  $CH_3COOH$  is less or more than that of  $10^{-4}$  HCl. Justify your answer.
- Calculate pH of 0.004 M an acid solution. If it is a strong acid which is 95% changed into ions in  $H_2O$ .
- Write down the main points of Arrhenius theory of ionization.
- Determine the mass of HCl required to prepare 400 ml of 0.85 m HCl solution.
- What are buffer solutions, explain with suitable examples.

### CHAPTER NO. 8 (Chemical Kinetics):

- Define following terms:  
(i) Rate expression (ii) Rate constant (iii) Threshold energy  
(iv) Energy of Activation. (v) Order of reaction
- Give reasons:  
(i) Why the energy of activation decrease with increase in temperature?  
(ii) Why a negative catalyst decreases the rate of reaction?  
(iii) Why rate of reaction is directly proportional to concentration of reactant?  
(iv) Why rate of reaction becomes double for every 10K rise in temperature?  
(v) Why powdered zinc react vigorously as compared to a piece of zinc metal?
- Differentiate between:  
\* Rate of reaction and Rate constant \* Rate constant and Specific rate constant  
\* Promoters and Inhibitors \* Threshold energy and Activation energy
- Determine the initial rate of following reaction at  $33^\circ C$  while its rate constant is  $8.5 \times 10^{-5} \text{ dm}^3/\text{mole.sec}$ .  $2A \rightarrow P$  if initial concentration of A is  $0.01 \text{ mol/dm}^3$ .
- Write rate expression for the following reactions:  
(i)  $PCl_5 \rightleftharpoons PCl_3 + Cl_2$  (ii)  $2NO + O_2 \rightleftharpoons 2NO_2$   
(iii)  $H_2SeO_3 + 6I^- + 4H^+ \rightleftharpoons Se + 3I_2 + 3H_2O$
- For a chemical reaction  $A \rightarrow B$ , the threshold energy of reaction is 31 kJ/mole. The average internal energy of A is 12 kJ/mole; calculate the activation energy of A.
- Write the rate expression, find the value of rate constant and determine the order of reaction using the following data:

	A	B	Rate
(i)	0.1M	0.1M	$2 \times 10^{-3} \text{ MS}^{-1}$
(ii)	0.2M	0.1M	$8 \times 10^{-3} \text{ MS}^{-1}$
(iii)	0.1M	0.2M	$4 \times 10^{-3} \text{ MS}^{-1}$

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

### COMPUTER SCIENCE – XI

#### Important Information:

Information for MCQs (Section – A)

It is not possible to suggest important MCQs but for the preparation of MCQs read your syllabus book, attempt all MCQ's of last 10 years and do preparation of all MCQ's which are provided by your teacher.

### Section B

#### CHAPTER #01

##### Short Q/A

1. Define Information Technology? Write its three uses.
2. *Why do the people call this world as Global Village?*
3. *Which device is used to convert printed or handwritten text documents, images, or a particular object into a digital file format? Name its types.*
4. What is the use of Optical Mark Reader (OMR)?
5. What is monochrome monitor? Name its types.
6. What is meant by RGB monitor? Name any three types.
7. How does an impact printer work? Give three examples of impact printers.
8. What is the basic use of Plotter? Name its types
9. Write any three Objectives of Operating System
10. Write any three Characteristics of Operating System
11. Which type of system software is used for converting instructions written in Computer
12. How are Utilities software beneficial for us? Name some types.
13. How does Cache (Cache memory) improve our system's performance?
14. What types of memory is required to save user data permanently? Give some examples.
15. What is Bit, Nibble, Byte and Word?

##### Long Q/A

1. What is an Operating System? Explain its Objectives and Functions.
2. What is a program? Define different types of programming languages
3. What are the two major types of Printers? Explain each type with an example.
4. What is secondary memory? Explain various secondary storage devices.
5. What are the different scanning input devices? Explain any one of them.

#### CHAPTER #02

##### Short Q/A

1. What is a Computer Network? Write its any two uses.
2. Name the component that is used to connect two dissimilar networks.
3. What is the best use of Switch in networking?
4. What is Network Operating Systems (NOS)? Name any two types
5. What is Networking Hardware? (Components of LAN)
6. What is the Internet? Write any three advantages
7. Write some advantages of e-mail
8. Write some disadvantages of e-mail
9. What is Web-Browser? Give some examples.

##### Long Q/A

1. Explain any three network components.(Bridge, Router, Gateway, switches)
2. Explain any three types of network topology.
3. What is Internet? Explain the role of ISP. (Internet Service Provider).

**CHAPTER # 03**

1. Draw and label simple Data Communications System
2. Name the Components of data communication system
3. What is Protocol? Name any three Functions of Protocol.
4. Define TCP/IP.
5. Define MODEM (Modulator- Demodulator)
6. Define ASCII coding scheme.
7. Define Bandwidth with its types
8. Draw OSI Reference Model

**Long Q/A**

1. What is Data Communication? Explain
2. What is Network protocol? Define its various types.
3. Explain various types of Directional Transmission Modes with diagram.
4. Explain any two unguided (wireless) communication channel
5. Explain OSI Model with diagram.

**CHAPTER # 04****Short Q/A**

1. What is the application of Computer in Education?
2. What is the application of Computer in Communication?

**CHAPTER # 05****Short Q/A**

1. Draw and label Block diagram of a Digital Computer
2. Define different types of buses in computer.
3. What is a computer register? Name its types.
4. Define two operations of STACK

**Long Q/A**

1. What is Register? Explain any two of them.
2. Define different types of Buses. (Address Bus, Data Bus, Control Bus)
3. What is CPU? Define its components.
4. What is Fetch-Cycle? Explain with diagram.

**CHAPTER # 06****Short Q/A**

1. How do you know that your system is infected with Computer Virus?
2. How do you protect your system from Virus attacks?
3. How do you identify that your system is infected with the Boot Sector Virus?

**Long Q/A**

1. What is a computer virus? Explain its different types.
2. What are the different types of threats we have to face on computer and how can we protect it?

**Differentiate Between**

1. System Software and Application Software
2. Impact and Non-impact printers
3. RAM and ROM
4. Analog signals and Digital signals
5. Synchronous Transmission and Asynchronous Transmission
6. Compiler and Interpreter
7. Primary Storage and Secondary Storage

**Abbreviations**

OMR	OCR	GUI	SVGA	CRT	BIOS
LAN	WAN	MAN	TCP/IP	ISO	CPU
MAR	PC	IR	SNA	FTP	WWW
MICR	IBM	LCD	LED		

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

ENGLISH – XI

### SECTION “A” (COMPULSORY) (MULTIPLE CHOICE QUESTIONS)

Note. Secure full marks through reading the literature i.e. Prose, Poems and Plays thoroughly.

### SECTION “B” (SHORT-ANSWER QUESTIONS)

#### Sub Section (I) INETERMEDIATE English BOOK I

- Q.1. What would have happened if there had been a panic on ‘Birkenhead’?
- Q.2. What did the Quaid-e-Azam tell about his people few days after he landed in Karachi?
- Q.3. Why does English have such a large vocabulary?
- Q.4. How does F. Sherwood Taylor define the term ‘Science’?
- Q.5. Differentiate between ‘scientific’ and ‘unscientific’ work.
- Q.6. Describe the behaviour of the soldiers on the ship ‘Birkenhead’?
- Q.7. What are the four contributions made by science to the welfare of society? Answer with reference to the lesson “Science and Society”.
- Q.8. Why was Manning certain of Charlton’s guilt after peering closely into his face?
- Q.9. Why was there a roar of laughter when the author left the bank?
- Q.10. The author, Stephen Leacock, was a respected university teacher and a highly successful writer. Do you think this is a true story?
- Q.11. Why did the Congress leaders spend most of the Second World War in prison?
- Q.12. Why were the Baron and the Baroness angry with Amalie?
- Q.13. How successful has the United Nations Organization been so far in preventing local wars?
- Q.14. What is the function of the International Bank/WHO/UNESCO/UNICEF?
- Q.15. What is the designation of the Chief Officer of the United Nations? For how long and by whom is he appointed?
- Q.16. What did people decide on 23<sup>rd</sup> March 1940?
- Q.17. What, in your opinion, was the reason of the Quaid-e-Azam’s sadness after independence?
- Q.18. Why does the writer apply the word “terrible” to the first year of Pakistan’s history as an independent state?
- Q.19. Describe a heroic action that took place after the Birkenhead went down?
- Q.20. What are the limitations of science in regard to the service for the society?

#### Sub Section (II) SELECTIONS FROM ENGLISH VERSES

- Q.1. Why do people think that Lucy is a ‘living child’?
- Q.2. What news did the young soldier give to emperor Napoleon?
- Q.3. What penalties does the minstrel foresee for the man who has no love for his native land?
- Q.4. Throw light on the concluding lines of ‘The Deserted Village’?
- Q.5. Why did King John become jealous of the Abbot of Canterbury?
- Q.6. What is the idea presented in the poem “Under the Greenwood Tree”?
- Q.7. What, according to Sir Henry Wotton, is the most essential factor in a man’s life that ensures his happiness?
- Q.8. What does Henry Wotton’s happy man feel about, name, fame and needs of the society?
- Q.9. How did the villagers enjoy holidays before the village was deserted?
- Q.10. What were the three questions asked by King John?
- Q.11. What were the answers given by shepherd?
- Q.12. What is a ballad? Give an example of ballad from your book?
- Q.13. Who was Lucy? What happened to her on her way to the town?

- Q.14. What did Lucy's parents do when she did not return?  
 Q.15. What is the legend of Lucy?  
 Q.16. What inspired William Wordsworth to write the sonnet composed upon Westminster Bridge?  
 Q.17. What did Wordsworth feel as he witnessed the man-made beauty?  
 Q.18. What is the main idea behind the poem "Abou Ben Adhem"?  
 Q.19. Why did the messenger hold on to the horse's mane and keep his lips compressed when he stood before Napoleon?

### Sub Section (III) TWO ONE ACT PLAYS

- Q.1. Why did Albert challenge the Count of Monte Cristo to fight a duel?  
 Q.2. What is an 'Organized butchery' of young boys according to Mrs. Meldon?  
 Q.3. How could Professor Henry Corrie's invention revolutionize warfare?  
 Q.4. 'The Count of Morcerf was a villain through and through.' Comment.  
 Q.5. What was the cause of enmity between the two counts?  
 Q.6. Briefly describe the role played by Morrel or Beauchamp in the play.  
 Q.7. Why did the Countess of Morcerf visit the Count of Monte Cristo's house? What was the outcome of her visit?  
 Q.8. What is meant by "duel"? Define "second".  
 Q.9. What was fixed for Bois de Vincennes? Describe the happenings.  
 Q.10. How was the Count of Monte Cristo avenged?  
 Q.11. Do you think that the end of the play "The Count's Revenge" is justified? Give reasons.  
 Q.12. Does the physical appearance of Professor Henry Corrie depict his true nature?  
 Q.13. Who is Charlotte and what role does she play in the play "Progress"?  
 Q.14. What plans does Professor have for his invention?  
 Q.15. Who was Eddie and what happened to him?  
 Q.16. What did Mrs. Meldon learn about her son on his third death anniversary?  
 Q.17. What did Mrs. Meldon want her brother to do with his invention? And why?  
 Q.18. Do you think that Mrs. Meldon was justified in her action? Refute or Justify.  
 Q.19. How did the Count of Morcerf betray his country?  
 Q.20. What are the views of Professor Henry Corrie about women? Is he justified?

### Sub Section (IV) GRAMMAR

- Correct the errors/omission of verbs, prepositions and articles (Practice, as directed in the class)
- Memorize unfamiliar or new words or phrases (vocabularies) used in Prose, Poems and Plays for English to English meanings.
- Pair of Words for sentences.

Which, Witch. Banned, Band. Missed, Mist. Plain, Plane. Mail, Male. Mind, Mined. Find, Fined. Weather, Whether. Father, Farther. Oh, Owe. Flower, Flour. Thrown, Throne. Principal, Principle. Where, Wear. Weight, Wait. Weak, Week. Heard, Herd. Berry, Bury. Worn, Warn. Break, Brake. Sail, Sale. Pail, Pale" Scent, Cent. Sent, Piece, Peace. Scene, Seen. Straight, Strait. Knight, Night. Side, Sighed. Stationery, Stationary. Meet, Meat. Advice, Advise. Sight, Site. Ail, Ale. Altar, Alter. Aloud, Allowed. Ascent, Assent Adapt, Adopt Birth, Berth Bare, Bear Bail, Bale Ball, Bawl. Beech, Beach. Beat Beet. Bred, Bread. Blew, Blue. Carat, Carrot. Born, Borne. Bolder, Boulder. Boarder, Border. Ceiling, Sealing. Cereal, Serial. Cymbal, Symbol. Cue, Queue Council, Counsel. Carrier, Career. Canvas, Canvass. Dual, Duel. Disease, Decease. Die, Dye. Fair, Fare. Flew, Flue. Grate, Great. Lessen, Lesson. Loose, Lose. Not, Knot. Wring, Ring. Affect, Effect. Allusion, Illusion. Allude, Elude. Amend, Emend. Apposite, Opposite. Apprise, Appraise. Biannual, Biennial. Cemetery, Symmetry. Collision, Collusion. Coma, Comma. Contagious, Contiguous. Corporal, Corporeal. Corps, corpse. Confirm, Conform. Dairy, Diary. Decease, Disease. Diseased, Deceased. Descent, Decent. Defy, Deify. Elicit, Illicit. Emigrant, Immigrant. Eminent, Imminent. Enervate, Innervate. Enumerable, Innumerable. Exorcise, Exercise. Ghostly, Ghastly. Heaven, Haven. Idle, Ideal. Ingenious, Ingenuous. Moan, Mourn. Ordinance, Ordnance. Petrol, Patrol. Potable, Portable. Quiet, Quite. Spacious, Specious. Thrash, Thresh. Urban, Urbane. Venal, Venial. Wreath, Wreathe. Wreck, Wreak.

**SECTION “C”**  
**(DETAILED-ANSWER QUESTIONS)**

Note. Attempt all questions from this section. All questions carry equal marks.

1. **LETTERS**To an editor of a newspaper expressing concern over (the hazard of traffic accidents and traffic jams in Karachi) or (law and order situation in Karachi) or (the inadequate supply of water in your locality) or (insanitary conditions in your locality) or (need for a public library in your locality) or (frequent power failure) or ( increasing street crimes)

**OR**

**STORIES**\*Unity is Strength \*Pride Hath a Fall \*Tit for Tat \*Knowledge is Power \*God Helps Those, Who Help Themselves \*No Pains, No Gains \*Might is Right \* Greed is Curse

2. **PARAGRAH WRITING**

\*Discipline \*Energy Crisis \* Internet \*Patriotism \*Pollution \*Social Media \*Corruption  
\*Science \* An exciting Cricket Match \* Natural Disaster \* Terrorism

3. **TRANSLATION**

Practice, as directed in the class.

# آدم جی کو چنگ سینٹر

تیاری پرچم برائے امتحانات ۲۰۱۷-۲۰۱۸

اسلامی تعلیم۔ گیارہویں جماعت (سائنس گروپ)

اہم ہدایات برائے حصالف (کیشور الاتھابی سوالات)

حصالف جو کیشور الاتھابی سوالات پر مشتمل ہے اس کی بہتر تیاری کے لئے ضروری ہے کہ طالب علم درسی کتاب کے علاوہ جوچھے اسالہ پر چوں سے بھی تیاری کریں۔

اہم سوالات برائے حصہ "ب"

☆ اہم قرآنی آیات و احادیث (ترجمہ کئے) برائے سوال نمبر ۳۔

- (i) يَا يَهُوَ الَّذِينَ امْنَأُوا نَفْسَهُوْ وَقَرُولُو قَرُولَا سَدِيدَه يَا انَّمَا بَعْثَتْ لَأَنَّمَ حَسَنَ الْأَخْلَاقَ
- (ii) لَقَدْ كَانَ لَكُمْ فِي رَسُولِ اللَّهِ أَسْوَةٌ حَسَنَةٌ يَا كُلُّ الْمُسْلِمِ عَلَى الْمُسْلِمِ حِرَامٌ دَمٌ وَمَالٌ وَعَرْضٌ
- (iii) اَنْ فِي خَلْقِ السَّمَوَاتِ وَالْاَرْضِ وَالْخِلَافِ الْبَلْ وَالنَّهَارِ لَا يَتَّلِي لَأَوْلَى الْبَابِ
- (iv) وَمَا اتَّاكُمُ الرَّسُولُ فَمُحْذِنُو وَمَا نَهَاكُمْ عَنْهُ فَانْتَهُوْ يَا وَلَا تَكْسُبُ كُلُّ نَفْسٍ اَلَا عَلَيْهَا وَلَا تَزَرُّ زَرَّةً وَزَرَّ اُخْرَى
- (v) اَنَّ اللَّهَ يَأْمُرُ بِالْعَدْلِ وَالْإِحْسَانِ وَمَا عَصَمُوْ بِحِجْلِ اللَّهِ جَمِيعًا وَلَا تَفْرُقُوْا.
- (vi) لَنْ تَنَالُو الْبَرَ حَتَّى تَنْفَقُو اَمَّا تَنْجِيْبُونَ لَأَنَّ اَكْرَمَكُمْ عَنْدَ اللَّهِ اَنْتُمْ
- (vii) الْمُسْلِمُ مِنْ سَلْمِ الْمُسْلِمِوْنَ مِنْ لِسَانِهِ وِيدِهِ / لَا يَرْحَمُهُ اللَّهُ مَنْ لَا يَرْحَمُ النَّاسَ
- (viii) اَنَّمَا الْاعْمَالُ بِالنِّيَاتِ وَانَّمَا لَكُلُّ اُمْرٍ مَا تُوْرِي
- (ix) مِنْ سَلْكٍ طَرِيقًا يُطْلَبُ فِيهِ عِلْمًا سَلْكُ اللَّهِ بِهِ طَرِيقًا مِنْ طَرِيقِ الْجَنَّةِ

☆ اہم سوالات برائے سوال نمبر ۳۔

- (i) رَسَالَتْ مُحَمَّدِي عَلِيٰ الْحَمْدُ لِلَّهِ كَيْ دُوْخُوصِيَاتْ تَحْرِيرِ كَيْجَيْه۔ يَا وَمَا اَرْسَلْنَاكَ الْأَرْزَحَةَ لِلْغَالِبِيَنَ سَے کیا مراد ہے؟
- (ii) حَجَّ كَوْئِي دُوْفُوا مَدْحُورِ كَيْجَيْه۔ يَا حَجَّ كَيْ جَامِعَتْ تَحْرِيرِ كَرِیں یا طواف اور سَعِیٰ کے بارے میں تَحْرِيرِ کریں۔
- (iii) كُلی امْدَنی سورتوں کی خصوصیات تَحْرِيرِ کریں یا مانگہ پُونُٹ تَحْرِيرِ کریں۔
- (iv) شُرُكَ کا مظہوم اور اسکی اقسام تَحْرِيرِ کریں۔ يَا پَانِچِ اخْلَاقَیِ رَذَّا کَلْ تَحْرِيرِ کریں۔
- (v) حدیث کے مطابق منافق کی نکاحیاں کیا ہیں؟ يَا رمضان اور پاکستان کا تعلق تَحْرِيرِ کریں۔
- (vi) جہاد بالسیف سے کیا مراد ہے؟ يَا قرآن و حدیث میں صلح رحمی کے بارے میں کیا تلقین کی گئی ہے۔
- (vii) آسمانی کتابوں اور جن انبیاء پر نازل ہوئیں ان کے نام تَحْرِيرِ کریں۔
- (viii) اسلام کے بنیادی عقائد تَحْرِيرِ کریں یا اسلام کے بنیادی اركان تَحْرِيرِ کریں۔
- (ix) ایقائے عہد کے بارے میں ایک قرآنی آیت اور حدیث کا ترجیح تَحْرِيرِ کریں۔
- (x) والدین کے احترام کے بارے میں ایک قرآنی آیت کا ترجیح تَحْرِيرِ کریں۔ يَا قرآنی آیت کی روشنی میں والدین کے حقوق تَحْرِيرِ کریں۔

- (xi) طائف کے کفار کے بارے میں تمی نبی ﷺ نے کیا ارشاد فرمایا۔  
نسبت اور احجام میں کیا فرقہ ہے؟ یا ہمایوں سے حسن سلوک کے بارے میں تمی کریم ﷺ نے کیا ارشاد فرمایا۔
- (xii) حدیث کی روشنی میں قوموں کی جاہی کی وجہ کیا ہے؟ یا احترام قانون کی وضاحت کجھے  
تمام آسانی ساتھوں کی مشترک تعلیمات کون سی ہیں؟
- (xiii) مسماں کے بارے میں کسی حدیث کا ترجیح کئے۔ یا قبیلہ دوسری کے لئے رسول اکرم ﷺ نے کیا دعا فرمائی؟
- (xiv) (xv) (xvi)
- (xvii) (xviii) (xix)
- (xx) (xxi) (xxii)
- (xxiii) (xxiv) (xxv)
- (xxvi) (xxvii)
- چھ فرشتوں کے نام اور کام تحریر کریں۔  
رسالت مذاہات کے بارے میں تحریر کریں۔  
حدیث کی تین اقسام تحریر کریں۔  
امیاء علیہ السلام کی دو خصوصیات تحریر کریں۔ یا خطبہ جنۃ الوداع میں رسول کریم ﷺ نے انسانوں کو مذاہات کے بارے میں کیا پیغام دیا۔  
ختم نبوت کے بارے میں ایک قرآنی آیت اور حدیث کا ترجیح تحریر کریں۔  
کل شہادت کی حریقی اور ترجیح تحریر کریں۔ یا قرآن مجید کی دو خصوصیات تحریر کریں۔  
روزہ انماز کے دو انفرادی فوائد تحریر کریں۔  
پانچ اخلاقی محسن تحریر کریں۔  
نجات و فلاح کیلئے کون دو چیزوں کا ہونا ضروری ہے۔  
إِنَّ اللَّهَ مَعَ الصَّابِرِينَ کی وضاحت کیجئے۔

## اہم سوالات برائے حصہ "ج"

- ۱۔ اسلام کے تین ادیٰ عقائد الگ تحریر کریں۔  
یا۔ عقیدہ توحید یا عقیدہ آخرت کا مفہوم تحریر کریں اور انسانی زندگی پر اس کے اثرات تحریر کریں۔  
یا۔ امیاء علیہ السلام کی دو خصوصیات تحریر کریں۔
- ۲۔ حج اور روزہ کی اہمیت قرآن و حدیث کی روشنی میں واضح کیجئے۔ نیز اس کے انفرادی اور اجتماعی فوائد بیان کریں۔
- ۳۔ والدین کے حقوق فرائض قرآن و حدیث کی روشنی میں تحریر کریں یا کب حلال کی اہمیت تحریر کریں یا رذائل اخلاقی تحریر کریں۔

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

MATHEMATICS – XI

**Important Information:**

Information for MCQs (Section – A)

It is not possible to suggest important MCQs but for the preparation of MCQs read your syllabus book, attempt all MCQ's of last 10 years and do preparation of all MCQ's which are provided by your teacher.

**CHAPTER NO. 1 (Set)**

Ex: 1.1 Q. 9, 15

**CHAPTER NO. 2 (Real and Complex Number System)**

Ex: 2.2	Q. 3, 4, 5, 7, 11
Ex: 2.3	Q. 3, 4, 6

**CHAPTER NO. 3 (Equations)**

Ex: 3.1	Q. 1, 2, 5
Ex: 3.3	Q. 1, 2 (ii, iv, viii) Q.3 (iii, iv)
Ex: 3.4	Example.2 (page 53), Example. (page 55) Q. 3, 4, 6, 7, 8, 10, 11, 12, 13, 14, 18, 25
Ex: 3.5	Q. 2(i,iii), 3(i,iii), 6, 8
Ex: 3.6	Q. 3, 4(v,vi), 5 (i, ii) 9, 11
Ex: 3.8	Q. 1, 2, 3, 4, 5, 6, 8, 9, 10

**CHAPTER NO. 4 (Matrices and Determinants)**

Ex: 4.1	Q. 6, 9(iii,iv), 10(j), 11,12,13 (i),14 (iii), 18, 19
Ex: 4.2	Q. 7, 9, 12, 15, 18, 20
Ex: 4.3	Q. 2, 4(i,ii)
Ex: 4.4	Q. 1(iv,viii), 5(iii,v,vii), (Do with both Cramer's rule & Matrix Method)

**CHAPTER NO. 5 (Groups)**

Ex: 5.1	Q. 3, 4, 5, 9, 10, 12
Ex: 5.3	Q. 2, 3, 6, 7, 8

**CHAPTER NO. 6 (Sequence and Series)**

Ex: 6.1	Q. 5, 11
Ex: 6.2	Q. 4, 5, 6, 8, 9, 10, 11, 12, 13, 16, 18
Ex: 6.3	Q. 4, 7, 8, 9, 10, 11, 14, 15
Ex: 6.4	Q. 2, 3, 4, 5, 6, 7, 8, 9
Ex: 6.5	Q. 3, 5, 6, 7, 9
Ex: 6.6	Q. 2 (iv), 3, 4, 5, 6, 8, 9
Ex: 6.7	Q. 3, 5, 7
Ex: 6.8	Q. 2, 3, 4, 5 (ii) 6, 7, 9
Ex: 6.9	Q. 1, 3, 4, 5, 6

**CHAPTER NO. 7 (Permutations, Combination and Introduction to Probability)**

Ex: 7.1	Q. 2, 9
Ex: 7.3	Q. 2, 4
Ex: 7.4	Q. 2, 3

**CHAPTER NO. 8 (Mathematical Induction and Binomial Theorem)**

Ex: 8.1	Q. 3, 4, 5, 6, 8, 11, 12, 13, 15, 16
Ex: 8.3	Q. 6, 7
Ex: 8.4	Q. 7, 8, 12, 13, 14
Ex: 8.5	Q. 1, 3, 5, 6, 10, 11, 13

**CHAPTER NO. 9 (Fundamentals of Trigonometry)**

Ex: 9.1	Q. 1 (iii, iv), 2 (i), 7, 8, 9, 10
Ex: 9.2	Q. 3, 4, 5, 8, 10, Example (page 303)

**CHAPTER NO. 10 (Trigonometric Identities)**

- Ex: 10.1 Q. 4, 5, 7, 8, 9, 10, 11, 12, 18, 21 (ii, iv)  
Ex: 10.2 Example (page 313)  
Q. 14, 16, 17, 18, 19, 20, 21  
Ex: 10.3 Q. 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 17, 19, 20

**CHAPTER NO. 11 (Graphs of Trigonometric Function)**

- Ex: 11.2 Q. 1, 2, 5, 6

**CHAPTER NO. 12 (Solutions of Triangles)**

- Ex: 12.1 Q. 2, 4, 5, 6  
Ex: 12.2 Q. 1(v), 2, 3, 4, 5, 6, 7, 8  
Ex: 12.4 Q. 1, 5, 9, 12, 13, 14  
Ex: 12.5 Q. 1, 5, 9, 10, 11, 12, 13

**CHAPTER NO. 13 (Inverse Trigonometric Functions and Trigonometric Equations)**

- Ex: 13.1 Q. 5, 6, 7, 8, 9, 10, 11, 13, 14  
Ex: 13.2 Q. 1, 2, 3, 4, 11, 12, 15

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

**PHYSICS - XI****Important Information:**

1. \*\* means that topic is very important for Section "C".
  2. \* means that topic is important for Section "B".
  3. Without any sign means that you have to prepare to decrease the risk factor.
  4. Information for MCQs (Section – A)
- It is not possible to suggest important MCQs but for the preparation of MCQs read your syllabus book, attempt all MCQ's of last 25 years and do preparation of all MCQ's which are provided by your teacher.

**CHAPTER 01: Scope of Physics****Questions & Scientific Reasons:**

1. \* Determine the dimension of following physical quantities:
 

• Angular Momentum	• Couple
• Torque	• Tension
• Power	• Gravitational Potential
• Gravitational Constant	• Frequency
• Work	
2. \* Define random and systematic error and how both are reduced.
3. \* Is it possible to have two quantities with the same dimension but different units. Give their examples.

**CHAPTER 02: Scalars and Vectors****Questions & Scientific Reasons:**

1. \* Prove that:  

$$\text{** } \vec{A} \bullet \vec{B} = \vec{B} \bullet \vec{A}$$

$$\text{** } \vec{A} \times \vec{B} = \vec{B} \times \vec{A}$$

$$\text{** } \vec{A} \bullet (\vec{B} + \vec{C}) = \vec{A} \bullet \vec{B} + \vec{A} \bullet \vec{C}$$

$$\text{** Area } \square = \left| \vec{A} \times \vec{B} \right|$$
2. Should a quantity having magnitude and direction be necessarily a vector?
3. Can the magnitude of the resultant of two vectors be greater than the sum of magnitude of individual vector?
4. Can the resultant of two vectors of the same magnitude be equal to the magnitude of either of the vector? How?
5. It is possible to add three vectors of equal magnitude but different direction to get a null vector? If you think so, illustrate it by drawing a suitable diagram

**Problems Exercise:** Problem #: \*7, 10, \*12, \*13, \*15, \*16, 17, \*20, \*22, \*23

**Solved Example:** Example #: \*2.8, \*2.10, \*2.12 and \*2.13

**Past Papers:** \*2006 Q1 (d) and \*2009 Q2 (v)

**Extra Problems:**

1. \* One component of 100N force is 50N. Calculate its another component.
2. \* Two forces  $F_1$  and  $F_2$  which are equal in magnitude and their resultant  $F$  is equal to the magnitude of these forces. Determine angle between  $F_1$  and  $F_2$ .

**CHAPTER 03: Motion****Questions & Scientific Reasons:**

1. \*\*Elastic Collision in one dimension with their cases.
2. \*/\*\* Acceleration of bodies and tension of string when two bodies hang vertically.
3. \*The average velocity of a particle is zero but not its average speed. Is it possible?
4. \*Show that force is equal to the rate of change in momentum.
5. \*Under what condition acceleration will be maximum and minimum on an inclined plane.
6. \*Is it possible for a body to have acceleration when moving with (a) constant velocity  
(b) constant speed?
7. \*Why kinetic friction is less than the limiting friction?

8. \*It is observed that all bodies sliding down a frictionless inclined plane have the same acceleration.

**Problems Exercise:** Problem #: \*2, \*3, \*4, \*5, \*9, 10, \*11, \*12, \*13, and \*16

**Solved Example:** Example #: \*3.1, \*3.2, and \*3.7

**Past Papers:** \*2007 Q1 (d) and \*2006 Q2 (d)

**CHAPTER 04: Motion in Two Dimensions**

#### **Questions & Scientific Reasons:**

1. \*\*Define projectile motion. Derive mathematical expression of trajectory for projectile, Max. height and range of projectile.
  2. \* Derivation for centripetal acceleration.
  3. \*Show that when a projectile is projected with  $76^\circ$ , its horizontal range will be equal to the maximum height.

**Problems Exercise:** Problem #: \*4, \*6, \*7, \*8, 10, \*12

**Solved Example:**      Example #: \*4.2

**Past Papers:** \*2009 Q2 (VIII), \*2008 Q3 (d), \*2007 Q2 (d), \*2006 Q3 (d), \*2005 Q3 (d), 2012 Q2(viii), \*2011 Q2 (ix)

### **Extra Question:**

- \* The range of a missile is 100km and its target is 25km then calculate its two possible launch angles and min or max time of flight.
  - \* Prove that max. range is equal to four times its max. height. Also calculate angle of projection.

CHAPTER 05: Torque, Angular Momentum and Equilibrium

#### **Questions & Scientific Reasons:**

1. \*Define equilibrium. Also explain conditions of equilibrium.
  2. \*State and prove law of conservation of angular momentum.

**Problems Exercise:** Problem #: \*8 and \*10

**Solved Example:** Example #: \*5.3, 5.5

Past Papers: 2013: Q2 (f)

CHAPTER 06: Gravitation

#### **Questions & Scientific Reasons:**

- Ques. 1 & Solved Examples**

  1. \*\*Derive an expression for gravitational acceleration in both cases;  
(i) w.r.t depth                   (ii) w.r.t. altitude
  2. \* How to produce artificial gravity in a space craft. Explain.
  3. \* Discuss the phenomenon of weightlessness.
  4. \*What happen with the gravitational force if the masses as well as the distance between the bodies are doubled?

**Problems Exercise:** Problem #: \*2, \*4, \*5 and \*6

**Solved Example:**      Example #: 6.2

**Past Papers:** \*2008 Q4 (d); \* 2013 Q2 (ii)

**Extra Problem:** \*At what depth from earth surface where gravitational acceleration becomes three fourth as earth surface.

CHAPTER 07: Work, Power and Energy

#### **Questions & Scientific Reasons:**

1. \*\*Explain work energy equation. State a mathematical expression.
  2. \*\*Derive a mathematical expression for Absolute PE.
  3. \*Show that power is the scalar product of force and velocity.

**Problems Exercise:** Problem #: \*1, \*4, \*5, 6 and 7

**Past Papers:**

**CHAPTER 08: Wave Motion and Sound****Questions & Scientific Reasons:**

1. \*\* Derive  $f_n = n/f$ , where all terms are using in their usual meaning.
2. \*\* Define SHM and give its conditions. Prove that projection of particle "P" on diameter of a circle executes S.H.M. and derive formula for its time period.
3. \*Derive the expression for instantaneous velocity of projection of a particle moving with uniform speed on the circumference of a circle. Also prove mathematically the total energy of a body attached to an elastic spring and executing SHM remains the same everywhere.
4. \*Define intensity of Sound and loudness. Explain the phenomenon of Beats, obtain an expression for beat frequency.
5. \*\*Explain Newton's formula for speed of sound. Also explain Laplace Correction.
6. \*Sonometer & its laws for standing wave.
7. State the basic conditions of simple harmonic motion.
8. \*A certain simple pendulum has an iron bob. Would its behavior change if we replace the iron bob with a lead bob of the same size?
9. \*Will the period of a vibrating spring increase, decrease or remain constant by addition of more weight?
10. \*What happens to the time period if the length of the pendulum is changed?
11. \* What happens to the time period of the pendulum if the mass of bob is changed?
12. \* Would you keep the amplitude of a simple pendulum small or large? Why?
13. \* How the speed of a transverse wave in the string will change if its tension is made four times.
14. \*Why does sound travels faster in solids than in gases.

**Problems Exercise:** Problem #: \*2, \*4, \*\*5, \*6, 9 and \*10

**Solved Example:** Example #: \*8.3, \*8.5

**Past Papers:** \*2009 Q2 (x), \*2008 Q5 (d), \*2008 Q6 (d), \*2009 Q2 (xiii), \*2007 Q5 (d), \*2007 Q6 (d), \*2006 Q5 (d), \*2006 Q6 (d).

**CHAPTER 09: Nature of Light****Questions & Scientific Reasons:**

1. \*\*Define diffraction. What is diffraction grating? How it is used to determine the wavelength of sodium light? Obtain the relevant mathematical expression.
2. \*Define X-Rays? Derive Bragg's law for x-ray diffraction.
3. \*\*Define interference of light. Explain Newton's ring. Also derive formula for the radius of N<sup>th</sup> Newton's ring.
4. \*What is the necessary condition for the path difference between two waves when they interfere (a) constructively (b) destructively.
5. \*Explain, why it is said that the light wave fronts from sun are plane wave fronts.
6. \*Why central ring in the Newton's ring always be dark.
7. \*Differentiate between Fresnel diffraction and Fraunhofer diffraction.

**Problems Exercise:** Problem #: \*9.3, \*9.4, \*9.6, \*9.8 and \*9.9

**Solved Example:** Example #: \*9.1

**Past Papers:** 2009 Q2 (XII), 2008 Q7 (d) and 2000 Q7 (d)

**CHAPTER 10: Geometrical Optics****Questions & Scientific Reasons:**

1. \*\*Define compound microscope. Write down its construction and working. Also derive formula for its angular magnification.
2. \*\*Define simple microscope and magnifying glass. Derive formula for its angular magnification.
3. \*Derive the lens formula for a convex lens. Why do thick lenses possess chromatic and spherical aberrations? Suggest remedies for these defects.

**Problems Exercise:** Problem #: 3.6, \*8, \*9, \*12, 13 and \*14

**Solved Example:** Example #: 10.6, 10.7

**Past Papers:** \*2009 Q2 (ix), \*2008 Q8 (d), \*2007 Q8 (d) and \*2206 Q8 (d); 2012 Q2(xii)

# آدم جی کو چنگ سینٹر

## تیاری پرچہ برائے امتحانات ۲۰۱۸-۲۰۱۷

اردو-گیارہویں جماعت (سائنس گروپ)

### اہم بڑیات برائے حروف (کثیر الامتحانی سوالات)

### حصہ "ب" (مختصر جواب کے سوالات)

سوال نمبر (۲): مندرجہ ذیل اشعار میں سے دو کی تحریک، شاعر کے حوالے کے ساتھ کریں۔

طریقہ جواب سوال نمبر ۲

## ☆.....ایک شعر کی تشریح کے ۵ نمبر ہیں:

حول شاعر

تشریح نمبر آن

☆.....حوالہ شاعر میں شاعر کا نام اور ایک لقب تحریر کر دینا کافی ہے۔

☆.....تشریح کے ذیل میں شعر کا نبیادی خیال اور فنی محاسن کی نشان دہی کے ساتھ مکمل پیش منظر موزوں الفاظ میں تحریر کیا جائے۔

☆.....ہر شعر کی تشریح میں لازمی طور پر بھرتی کے متعلق شرعاً شامل کرنے سے گرینز کیا جائے۔

تشریع کے لیے اہم غربیات:

- |    |                       |               |
|----|-----------------------|---------------|
| ۱- | میر تقی میر           | (دونوں غزلیں) |
| ۲- | خواجہ میر درد         | (دونوں غزلیں) |
| ۳- | مرزا اسداللہ خاں غالب | (دونوں غزلیں) |
| ۴- | مولانا حضرت موبانی    | (دونوں غزلیں) |

☆.....☆.....☆

**سوال نمبر (۳):** (الف) منتخب کردہ اقتباس کے مصنف اور حق کا نام تحریر کریں۔

(ب) مندرجہ ذیل میں سے کسی ایک اقتباس کی تحریخ کریں۔

طریقہ جواب سوال نمبر ۳

☆.....افتیاس کی تشریح چند بیاناتی نکات پر محض ہوتا ہے، ان نکات کی تفہیق برباد و تسلیل کے ساتھ کرنا زیادہ نہ سبک کا مستحق بناتا ہے۔

☆.....حوالہ مصنف میں مصنف کا نام اور ایک لقب تحریر کر دینا بہت کافی ہے۔ تفصیلات کی ضرورت نہیں۔

☆..... جو اس سبق میں سبق کا نام اور سبق کا ماغذہ لکھ دینا کافی ہے۔ اضافی تفصیلات تحریر کرنے پر بھی دوہی تفسیر دیے جائیں گے۔

## اہم اقتباسات:

نمبر شمار	اقتباس	عنوان کا نام	صفحہ
۱	انسان کی زندگی کا مختار یہ ہے..... نہایت مناسب مجود ہو۔	رسم و رواج کی پابندی کے نقصانات	۱
۱	بے سوچ اور بے سمجھ رسمات ..... جدا جدا عناصر کی ہیں۔	رسم و رواج کی پابندی کے نقصانات	۱
۲	اخلاقی اور عقلی قوتون کی ترقی ..... کسی قوت کی حاجت نہیں۔	رسم و رواج کی پابندی کے نقصانات	۲
۲	بہش اسی سے لپٹنے رہیں۔	رسم و رواج کی پابندی کے نقصانات	۲
۵	جنابر کے پسندیدہ ..... جذبوں کو پڑ مردہ اور ضعیف۔	رسم و رواج کی پابندی کے نقصانات	۲
۶	سچی سچی بیان نہ ہوا ہو۔	رسم و رواج کی پابندی کے نقصانات	۳
۷	حالات کا اصلی باعث ہوتی ہے۔	رسم کی پابندی ہر جگہ انسان	۳
۸	پیدائش ہوئے تھے۔	ان شرقي یا ايشائي قوموں میں	۳
۹	اس زمانے میں بھی حال ہے۔	تواریخ سے ثابت ہے.....	۵
۱۰	فن کا نشان دے سکتے ہیں۔	مسلمانوں کا قدیم طرز تعلیم	۸
۱۱	پوری قابلیت رکھتے تھے۔	مسلمانوں کا قدیم طرز تعلیم	۸
۱۲	حرمت کی نگاہ سے دیکھتے تھے۔	سلماں کا قدیم طرز تعلیم	۹
۱۳	منعقد کرتے تھے۔	سلمانوں کا قدیم طرز تعلیم	۹
۱۴	کس حد تک پہنچا کر رہے گی۔	سلمانوں کا قدیم طرز تعلیم	۱۰
۱۵	میں وہ آ جاتا تھا۔	عج اور جھوٹ کا رزم نامہ	۱۹
۱۶	لڑائی کا نجام کیا ہو؟	عج اور جھوٹ کا رزم نامہ	۱۹
۱۷	زہد کا شکا تھا۔	عج اور جھوٹ کا رزم نامہ	۲۰
۱۸	اصلاح ضروری ہو گئی۔	تکمیل پاکستان	۲۳
۱۹	مسلمانوں کا نصب الحین۔	تکمیل پاکستان	۲۸
۲۰	سائبیں کی تمام ایجادات۔	جدید سائنس اور عصری تفاضل	۲۳
۲۱	صدیوں پہنچے چلا جائے گا۔	جدید سائنس اور عصری تفاضل	۲۳
۲۲	کفاروں کے لیے یا آب شفا۔	خطوط غالب	۸۱
۲۳	کتابیں کیا چھپواؤں گا۔	خطوط غالب	۸۲
۲۴	قصاص کون لے گا؟	خطوط غالب	۸۳
۲۵	کہوں گا یوسف مرزا کو۔	خططاً غالب	۸۹
۲۶	پورا لیں ہو جاتا ہے۔	خطاً قبال	۹۰
۲۷	آفتاب سے محظوظ رکھا ہے۔	خطاً قبال	۹۰
	عائشنا آواز گوشی تھی۔	خطاً قبال	



## اہم سوالات:

- (۱) بے سوچے اور بے سمجھے پرانی رسمات کی تقلید سے کیا نقصانات ہوتے ہیں؟
- (۲) یہ خیال کہ پرانی رسم و راج کی پابندی سے انسان خراب ہو جاتا ہے، کیوں غلط ہے؟
- (۳) رسمات کی کورانی تقلید کس طرح انسان کو تزلیل کی طرف لے جاتی ہے؟
- (۴) قدیم زمانے کے مسلمانوں میں تعلیم و تعلیم کی کیا صورت تھی؟
- (۵) جب مسلمانوں میں تصنیف و تالیف کا سلسلہ شروع ہوا تو رس گاہوں میں کون کون سے علوم پڑھائے جاتے تھے؟
- (۶) علومِ فتنی اور علومِ عقلي میں کیا فرق ہے؟
- (۷) مسلمانوں کے عروج کے زمانے میں کن مقامات کو علمی مرکز کا درجہ حاصل تھا اور کیوں؟
- (۸) روزمرہ اور معاورے میں کیا فرق ہے؟
- (۹) تمثیلِ نگاری کے کہتے ہیں؟
- (۱۰) شاہ ولی اللہ کی اصلاحی تحریک کا مقصد کیا تھا؟
- (۱۱) سرید احمد خان نے بر صغیر پاک وہند کے مسلمانوں کے لیے خدمات انجام دیں وہ تحریر کیجئے۔
- (۱۲) علامہ اقبال نے مسلمانوں کی بیداری کے لیے کن چیزوں کو اہم قرار دیا؟
- (۱۳) سرید کے بعد ان کے جانشینوں نے کیا اہم قوی اور دینی خدمات انجام دیں؟
- (۱۴) سائنس کو ایک تحریکی علم کن لوگوں نے بنایا؟
- (۱۵) سائنس کی ترقی میں حصہ لیاں کیوں ضروری ہے؟
- (۱۶) سائنس کا مستقبل کیا ہے؟
- (۱۷) سبق "مامعظت" سے سبق سے بیس کیا سبق ملتا ہے؟
- (۱۸) دنیا میں لوگوں کے کیا کیا شوق ہوتے ہیں اور ان کے لیے وہ کیا کرتے ہیں؟
- (۱۹) الونجnost کی نٹانی سمجھنا کہاں تک درست ہے؟
- (۲۰) حضرت مسیح علیہ السلام کا مزار کہاں ہے؟ اور لوگ وہاں اکثر کیا کرتے ہیں؟
- (۲۱) جامع مسجد کے مشرقی منارے کے متعلق کیا روایت ہے؟
- (۲۲) میکسیکو شی کی تحریر و ترقی میں کن لوگوں نے اہم کردار ادا کیا ہے؟
- (۲۳) علامہ اقبال نے دہلی کو اسلامی شان و شوکت کا قبرستان کیوں کہا ہے؟
- ☆.....☆.....☆

[۳۸]

سوال نمبر (۶): مددجوؤں میں سے کسی دو کی تعریف شعری امثال کے ساتھ کیجئے۔

طریقہ جواب سوال نمبر ۶

☆.....ذکورہ تعریف کوئی حصوں پر مشتمل ہونا چاہیے:

[۳]

۱۔ تعریف

[۱،۵]

۲۔ شعری امثال

## ۳۔ شعری مثال کی وضاحت [۰۵]

☆..... تعریف ذکر کے اس کی ایک شعری مثال دینا اور پھر اس مثال کی وضاحت کرنا نہایت ضروری ہے۔

.....یا.....

[۰۸]

مثال نصاب غزلیات میں سے دو شعرا کے دو، دو اشعار تحریر کیجیے۔ جو پرچمیں نہ ہوں۔

☆.....☆.....☆

[۰۸]

سوال نمبر (۷): درج ذیل مخادروں کو اپنے جملوں میں استعمال کیجیے۔

تن بدن میں آگ لگنا	زندہ در گور کرنا	بائز پانچ دکھانا	ہاتھوں کے طوطے اڑانا	سنجن پانچ کرنا	آنکھوں میں خون چڑھانا	آنکھیں کھل جانا	جی جل جانا
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.....یا.....

[۰۸]

درج ذیل میں سے کسی دو اصناف ادب کی تعریف کیجیے۔

نعت	حمد	مرثیہ	نال
		سزناہ	غزل

☆.....☆.....☆

### حصہ "ج" (تفصیلی جواب کے سوالات)

[۱۵]

سوال نمبر (۸): مددوج ذیل میں سے کسی ایک شاعر کے اسلوب پر تبرہ کریں۔

طریقہ جواب سوال نمبر ۸

☆..... ۱۵ نمبر کے اس سوال کو تین حصوں پر مشتمل ہونا چاہیے:

ا۔ عمدہ تہذیب، تعارف۔

۲۔ دس سے بارہ خصوصیات، تکراریہ ہو، ہر خصوصیت کے لیے مناسب شعر ذکر کیا جائے۔

۳۔ تین سے چار مستند ناقدریں کی آراء تحریر کی جائیں۔

تبرہ کے لیے اہم شعرا:

میر قی میر	خواجہ میر درد	ظیارا کبرا بادی
مرزا اسداللہ خاں غالب	حضرت موبانی	

☆.....☆.....☆

[۱۵]

سوال نمبر (۹): مندرجہ ذیل میں سے کسی ایک نشرنگار کے طرز تحریر پر تبصرہ کریں۔

### طریقہ جواب سوال نمبر ۹

\*.....۱۵ نمبر کے اس سوال کو تم حصول پر مشتمل ہونا چاہیے:

۱۔ عمدہ تمہید، تعارف۔

۲۔ دل سے بارہ خصوصیات، بھگوارنہ ہو۔ (ہر خصوصیت کے ساتھ شعری مثال کی طرز پر تحری کرو لکھنا اچھا ہے، ضروری نہیں)

۳۔ تمن سے چار مستند ناقدرین کی آراء تحریر کی جائیں۔

تبصرہ کے لیے اہم نشرنگار:

پٹرس بخاری

مولانا حسین آزاد

سرسید احمد خان

الاطاف حسین حالی / شبلی فتحانی

ڈپٹی نزیر احمد

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017 – 2018

ZOOLOGY - XI

**Important Information:** Remember this is not a guess paper. The preparation paper help you that how you initiate your study

Information for MCQs (Section – A)

For MCQ's read your text book carefully line by line and mark all important points with highlighter.

### Important Questions for Section 'B'

#### CHAPTER NO. 1 (The Biology)

**Non reasoning questions:**

- Q.1. Define Biology and any 4 branches of Biology.
- Q.2. Describe Hydroponics (OR) Biological organization

**Reasoning questions:**

- Q.1. Why malarial concepts called hypothesis?
- Q.2. Distinguish between inductive reasoning and deductive reasoning?
- Q.3. A population is heavily affected by different epidemics what necessary actions should be followed to formulate a tentative statement as a scientist for specific diagnosis.
- Q.4. How artificial cloning is helpful for humans?
- Q.5. How phyletic lineage is important to us?

#### CHAPTER NO. 2 (Biological Molecules)

**Non reasoning questions:**

- Q.1. Differentiate between:
  - (a) Saturated and unsaturated acylglycerol
  - (b) Steroids and Carotenoids
- Q.2. Write a note on RNA as a carrier of Information.

**Reasoning questions:**

- Q.1. Many birds must store large amounts of energy to power flight during migration. Which type of organic molecules would be the most advantageous for energy storage. Why?
- Q.2. Why doesn't oil dissolve in water? Give a scientific explanation.
- Q.3. Monosaccharides are called 'reducing sugars' but disaccharides are not. Why?
- Q.4. Why butter solid and mustard oil is liquid at room temperature?
- Q.5. Why is water an amphoteric molecule?
- Q.6. Why carbon is said to be the back bone of bio-molecules?
- Q.7. Why urea production is high when person's diet contain more protein than is need for growth and repair?
- Q.8. Why is salt added in excess to pickles?
- Q.9. Steroids are not true lipids

#### CHAPTER NO. 3 (Enzymes)

**Non reasoning questions:**

- Q.1. Define enzyme, mode of action of enzyme (key lock and induced fit model) and energy of activation
- Q.2. How many types of enzymes?

**Reasoning questions:**

- Q.1. How enzymes act upon energy of activation?
- Q.2. Why the "induced fit" model is more widely accepted than the "lock and key" model?
- Q.3. Why are enzymes called as biocatalysts?
- Q.4. How the concentration of the product always is kept within a certain range?

**CHAPTER NO. 7 (The Kingdom Protocista)****Non reasoning questions:**

- Q.1. Define hypothesis and malarial concepts with sign and symptoms. Describe the life cycle of plasmodium.

**Reasoning questions:**

- Q.1. How colonial protozoan different from multicellular animals?  
 Q.2. Why all protozoans not performing phagocytosis while all of them have cell membrane?  
 Q.3. Why mosquito is called vector for malaria?

**CHAPTER NO. 10 (The Kingdom Animalia)****Non reasoning questions:**

- Q.1. Differentiate Between:  
 (a) *Chondrichthyes and Osteichthyes*  
 (b) *Acraniata and Craniata*  
 (c) *Bilateral symmetry and Radial symmetry*  
 (d) *Diploblastic and Triploblastic organization*  
 (e) *Complete and Incomplete metamorphosis*  
 (f) *Pseudo-coelom and Coelom*  
 (g) *Open type and Close type circulatory system*  
 (h) *Warm blooded and Cold blooded animals*
- Q.2. Describe phylum Hemi-Chordate OR Echinodermata OR Porifera  
 Q.3. Write a short note on phylum Platyhelminthes & Nematoda  
 Q.4. What is Alternation of Generation and polymorphism? Describe with reference to phylum Cnidaria.  
 Q.5. Write a note on parasitic adaptation in Platyhelminthes.  
 Q.6. Write a note on economic importance of Annelida or Mollusca OR Write down the diseases of nematodes.  
 Q.7. Write a note on coral and coral reefs.  
 Q.8. Write down the advantages of segmentation and coelom or advantages of exo skeleton.  
 Q.9. Define metamorphosis with types and examples and economic importance of Arthropods  
 Q.10. Define affinities and characteristic of chordates.  
 Q.11. Write a note on successful land vertebrates OR origin of birds OR flight adaptation of birds.  
 Q.12. Name the common groups of edible fishes OR fishes of Pakistan.

**Reasoning questions:**

- Q.1. Why Porifera have different types of canal system in the body?  
 Q.2. Why proto-nephridia are called flame cells?  
 Q.3. How echinoderms are closely related to chordates and hemichordates?  
 Q.4. Why Agnatha group is also called jaw-less fishes?  
 Q.5. Amphibians are said to be un-successful land vertebrates. Why?  
 Q.5. Give reasons why a snail and an octopus are classified under the same phylum?  
 Q.6. Give reasons why a snail and an octopus are classified under the same phylum?

**CHAPTER NO. 12 (Nutrition)****Non reasoning questions:**

- Q.1. Differentiate between  
 \* Anorexia nervosa and Bulimia nervosa.  
 \* Tube like and Sac like digestive tract  
 \* Peristalsis and Anti-peristalsis
- Q.2. Write a note on digestion in Amoeba, Planaria, Hydra and Cockroach  
 Q.3. What is holozoic nutrition?  
 Q.4. Write a short note on dental diseases?

**Reasoning questions:**

- Q.1. Why doesn't food enter the trachea instead the esophagus?  
 Q.2. How are the gastric mucosa protected from the acidic pH of the stomach?

- Q.3. How does pancreatic juice participate in the digestion of proteins? What enzymes are involved?
- Q.4. In the stomach and small intestine, the enzymes for digestion of proteins are secreted in an inactive form. Why?
- Q.5. A person eats chicken broast .Name the enzymes that will digest this meal in the GIT?
- Q.6. Why hydra has both types of digestion?

#### CHAPTER NO. 13 (Gaseous Exchange)

**Non reasoning questions:**

- Q.1. Describe respiratory system in earthworm, cockroach, fishes, birds and frog and explain counter current exchange in fishes?
- Q.2. Describe lung capacity? What is the role of haemoglobin and myoglobin in respiration? Define positive and negative breathing pressure?
- Q.3. Describe all respiratory disorders and define complete and incomplete ventilation?

**Reasoning questions:**

- Q.1. How breathing is different from respiration?
- Q.2. Why air is better respiratory medium than water?
- Q.3. Birds that fly at high altitudes need an especially efficient respiratory system. Why?
- Q.4. Why do the walls of trachea do not collapse when there is less air in it?
- Q.5. How does carbon mono oxide acts as a poison for human beings?
- Q.6. Why is the higher percentage of carbon dioxide transported by water of RBCs as compared to water of plasma? Also gives the equations of this process?

#### CHAPTER NO. 14 (Transport)

**Non reasoning questions:**

- Q.1. How many types of blood circulation?
- Q.2. Define Pulse rate, B.P, Blue babies, SAN, Edema
- Q.3. Write a note on blood vessels? What do you know about artificial pace maker?
- Q.4. Describe lymphatic system

**Reasoning questions:**

- Q.1. How do white cells differ from red cells? Give reasons.
- Q.2. Why is blood important for larger animals?
- Q.3. Amphibian circulation can be classified as double and incomplete. Why?
- Q.4. How does edema occur? Give reasons.
- Q.5. Why do RBCs begin to burst when placed in distilled water?
- Q.6. Why is a closed circulatory system more efficient than an open circulatory system?

**Draw a neat and labeled diagram of the following:**

- |                                  |                            |
|----------------------------------|----------------------------|
| * LS of hydra                    | * Human Respiratory system |
| * Human heart internal structure | * Human digestive system   |
| * Villi                          |                            |

**Label the following diagram only:**

- |  |  |
|--|--|
| * Planaria (internal structure)                | * Ascon type or Leucon type                  |
| * Fish (breathing)                             | * Star fish (water vascular system)          |
| * Paramecium or Trypanosoma                    | * Triploblastic or Diploblastic organization |
| * Life cycle of plasmodium                     | * Mollusca                                   |
| * Neries or Hirudinaria                        | * Prawn                                      |
| * Insect                                       | * Ascidia                                    |
| * A generalized chordate                       | * Digestive system of Cockroach              |
| * Air sacs of a bird                           | * Lymph node                                 |
| * Respiratory organ of earth worm or Cockroach |  |
| * Stomach muscle layers                        |  |

## Important Questions for Section ‘C’

### CHAPTER NO. 1 (Introduction to Biology)

Q.1. Write a detail note on “Application of biology for human welfare.”

### CHAPTER NO. 2 (Biological Molecules)

Q.1. What is nucleotide? Explain the structure of nucleotide molecules with its type

Q.2. Write a detail note on Protein

### CHAPTER NO. 3 (Enzymes)

Q.1. What are enzymes? Classify them, write down important characters and their role (mode of action)

### CHAPTER NO. 7 (Kingdom Protostista)

Q.1. Briefly describe animal like Protoctists

Q.2. Explain the life cycle of Malarial parasite

### CHAPTER NO. 10 (The Kingdom Animalia)

Q.1. What do you mean by polyp and medusa? Mention their functions describe the characters of that phylum and its classes with examples in which cnidocytes are present.

OR

Describe the salient features of Phylum Mollusca OR Arthropoda

OR

Write a detail note on Class Reptilia or Pices or Aves

### CHAPTER NO. 12 (Nutrition)

Q.1. Write a detail note on human digestive system with label diagram.

### CHAPTER NO. 13 (Gaseous Exchange)

Q.1. Describe the breathing mechanism in human. Explain the transport of CO<sub>2</sub> and O<sub>2</sub>

OR

State and explain the respiratory system of man.

Q.2. Explain in detail the process of respiration in animals.

### CHAPTER NO. 14 (Transport)

Q.1. List Cardio-vascular disorders. Write the causes, symptoms and precautionary measures of any five disorders mentioned in the list.

Q.2. What is immunity? Describe innate immune system.

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

**BOTANY – XII**

### Important Information:

#### **Information for MCQs (Section - A)**

It is not possible important MCQs but for the Preparation of MCQs read your syllabus book, Attempt all MCQs of last 25years and do preparation of all MCQs which are provided by your teacher.

### CHAPTER NO:1 (Homeostasis)

#### **Short Questions/Answers**

Define Osmoregulation and Thermoregulation, Adaptations in Xerophytes, Hydrophytes

#### **Detail Questions/Answers**

Osmoregulation in plants (Four Groups)

### CHAPTER NO:2 (Support and Movement)

#### **Short Questions/Answers**

Differentiate between Tracheids and Vessels, Heartwood and Sapwood, Sclerenchyma, Nastic Movement. Significance of Secondary tissues.

### CHAPTER NO:3 (Coordination and Control)

#### **Short Questions/Answers**

Biological Clock, Biohrythm and Circadian Rhythms, Defense against pathogens (Lines of defense)

#### **Detail Questions/Answers**

Responses to environmental stress. Plant Hormones.

### CHAPTER NO:4 (Reproduction)

#### **Short Questions/Answers**

Pollination and Types, Tissue culture, Development male/Female gametophyte, structure of Dicot and monocot seeds, Parthenocarpy chart shows the effects of red light and far red light, Seed dormancy,

Differentiate raceme and cyme inflorescence.

### CHAPTER NO:5 (Growth and Development)

#### **Short Questions/Answers**

Phases of Growth, Diagram of L.S of stem and root apices showing growth. Growth correlation.

#### **Detail Questions/Answers**

Conditions which alter the rate of growth.

### CHAPTER NO:6 (Chromosomes and DNA)

#### **Short Questions/Answers**

Chromosomal theory of heredity, The one gene-one enzyme hypothesis, Mutation and types, Sickle cell anaemia,

#### **Detail Questions/Answers**

Gene expression, DNA damage.

**CHAPTER NO:7 (Cell Cycle)**

**Short Questions/Answers**

Necrosis and Apoptosis, Meiotic error,

**Detail Questions/Answers**

Meiosis and Mitosis.

**CHAPTER NO:8 (Variation and Genetics )**

**Short Questions/Answers**

Test cross, incomplete and codominance, Choice of experimental materiel. Epistasis, Polygenic inheritance, Pleiotropy, Linkage and Diabetes Mellitus, Law of segregation  
Multiple alleles.

**Detail Questions/Answers**

Law of Independent Assortment, Sex linked inheritance in man with two examples.

**CHAPTER NO:11 (Ecosystem)**

**Short Questions/Answers**

Define Population, Community, Climatic factors, Topographic Factors, Nitrogen Cycle.

**Detail Questions/Answers**

Approaches to Ecology, Interaction and Types of Interaction, Interspecific association (e.g) Parasitism, Symbiosis, Predation and Grazing), Ecological Succession (Hydrosere)

**CHAPTER NO:12 (Some Major Ecosystem)**

**Short Questions/Answers**

Pond Ecosystem, Graphic representation Life in the sea.

**Detail Questions/Answers**

Define Biome Discuss, Tropical rainforest.

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

XII - Chemistry

Important Information:

Information for MCQs (Section – A)

It is not possible to suggest important MCQs but for the preparation of MCQs read your syllabus book, attempt all MCQ's of last 25 years and do preparation of all MCQ's which are provided by your teacher.

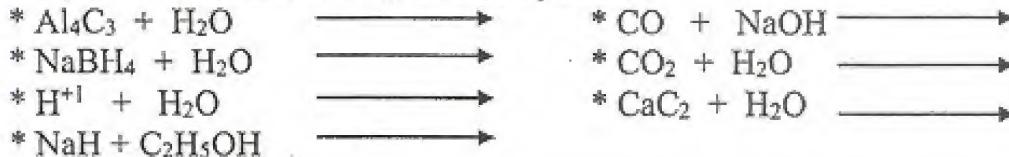
### PART-I (INORGANIC CHEMISTRY)

#### CHAPTER NO. 1 :

- State Mendeleev's periodic law? Discuss advantages and defects of Mendeleev's periodic table.
- State modern periodic law? How elements are classified on the basis of electronic configuration?
- How modern periodic table removed the weaknesses of Mendeleev's periodic table.
- Define periodicity. What are short and long periods of modern periodic table? How many periods are there in modern periodic table?
- Find out address of following elements in modern periodic table having atomic number:  
\* 9      \* 13      \* 19      \* 24      \* 29      \* 42      \* 47
- Differentiate between p-block active and p-block inactive elements.
- Write the valence shell electronic configuration of the following:  
\* Representative elements \* Inner transition elements \* Group VI-B & I-B \* Group IIIA & IIIB.

#### CHAPTER NO. 2 :

- Discuss position of hydrogen in group I-A and VII-A.
- What do you mean by hydrides? How are they classified? Discuss Ionic and covalent hydrides in detailed.
- Define water gas? Write two methods of its preparation and two methods for separation of hydrogen gas from water gas.
- Differentiate between Atomic & Nascent hydrogen.
- Give reasons of the following statements:  
\* Heavy water is called heavy.  
\* Metallic hydrides form interstitial hydrides.  
\* Atomic or Nascent hydrogen is more reactive than molecular hydrogen.  
\* Alkali and Alkaline earth metal hydrides are called salt like hydrides.
- Write only balanced chemical equation of reaction of atomic hydrogen with:  
\* P.      \* WO<sub>3</sub>      \* CuO      \* AgCl      \* O<sub>2</sub>
- Ionic hydrides are called true hydrides.
- Complete and balance following chemical equations:



#### CHAPTER NO. 3 :

- What happen when following compounds are heated: (Write only balanced chemical equation).  
\* Magnesite \* Baking soda \* Gypsum \* Lime stone
- Describe the preparation of sodium carbonate by Ammonia-Solvay process? Draw the flow sheet diagram.
- Show chemical formulae of the following compounds:

- \* Carnalite \* Dolomite \* Plaster of Paris \* Water glass \* Washing soda
- \* Discuss extraction of sodium metal by electrolysis of molten NaCl. Why anode and cathode compartments are separated in the extraction of sodium? Draw diagram of the cell.
- Give reasons of the following statements:
  - \* Elements of group I-A and II-A are electropositive.
  - \* I-A group elements metals are powerful reducing agent.
  - \* Na is softer than Mg.
  - \*  $Zn(OH)_2$  is soluble in excess of NaOH.
  - \*  $Li^+$  is smaller in size than its atom
  - \* Alkaline earth metals are more strongly hydrated than the alkali metal.
  - \* Elements of a group have same valence shell configuration.
  - \* Lithium and Beryllium markedly differ from other members of respective groups.
- Complete and balance following equations:
 

* $Ca(OH)_2 + NH_4Cl \longrightarrow$	* $CaCl_2 + Na_2CO_3 \longrightarrow$
* $Na_2CO_3 + H_2O + CO_2 \longrightarrow$	* $Na + H_2O \longrightarrow$
* $CaOCl_2 + HCl \longrightarrow$	* $FeCl_3 + NaOH \longrightarrow$
- Give a brief account and uses of Bleaching powder.

### REACTION CONVERSIONS

- Effect of heat on Magnesite, Baking soda, Gypsum, Lime stone.
- Calcium oxy chloride (Bleaching powder) in atmospheric  $CO_2$ .
- Chromium Oxide with KOH and  $Br_2$ .
- \* Soda ash fused with Sand \* Magnesium metal put in boiling water
- \* Magnesite reacts with  $H_2SO_4$  \* Bleaching powder reacts with  $Cl_2$ -gas

### CHAPTER NO. 4 :

- What is Metallurgy? Write name and chemical formulae of three ores of aluminum. How pure aluminum is obtained from its bauxite ore.
- Write a note on: \* Boric acid \* Lead pigments \* Allotropic form of Sulphur
- How sulphuric acid is manufactured by contact process?
- Write the chemical formulae of the following:
 

* Laughing gas	* Lead sesquioxide	* Oil of Vitriol	* Ammonal
* Cryolite	* Fluorspar	* Potash Alum	* Litharge
* Aqua regia	* Iron Pyrites	* Oleum	* Phosgene gas
- Give reasons why?
  - Electron population of 'Al' is less than that of 'B'.
  - Sulphuric acid has high boiling point and viscosity.
  - Sulphuric acid is strong dehydrating agent.
  - Diamond does not conduct electricity while graphite does.
- Write down the chemical equations for the following:
  - Sulphuric acid is a sulphonating agent
  - Auto oxidation-reduction of  $Cl_2$
  - Action of sulphuric acid on hot solution of Borax
  - Action of heat on boric acid
  - Aluminum metal reacts with  $Fe_2O_3$
  - Magnesium metal reacts with dilute  $HNO_3$
  - Copper metal reacts with hot concentrated  $H_2SO_4$
  - Concentrated sulphuric acid reacts with Oxalic acid
- What is an alloy? Write name, use and composition of any two alloys of aluminum with uses.
- Complete and balance following equations:
 

* $FeCl_3 + H_2S \longrightarrow$	* P + $HNO_3 \longrightarrow$
* S + $H_2SO_4 \longrightarrow$	* CO + $Cl_2 \longrightarrow$
* $PbCrO_4 + NaOH \longrightarrow$	* $NO_2 + H_2O \longrightarrow$
* $Na_2B_4O_7 \xrightarrow{\text{heat}}$	* $HBO_2 \xrightarrow{140^\circ C}$

**REACTION CONVERSIONS**

- Oxidizing action of chlorine.
- Chrome yellow with NaOH.
- Heating Colemanite with  $\text{Na}_2\text{CO}_3$ .
- Chromium Oxide with KOH and  $\text{Br}_2$ .

**CHAPTER NO. 5 :**

- Write chemical formulae of the following compounds:  
\* Copper pyrite \* Lunar Caustic \* Slag \* Blue stone \* Hypo
- Give reasons:
  - Anhydrous  $\text{CuSO}_4$  is white while Hydrated  $\text{CuSO}_4$  is blue.
  - Ligands are generally Lewis bases.
  - Copper metal obtained from bassemer converter is called blister copper.
  - $\text{H}_2\text{O}$  and  $\text{NH}_3$  are act as ligands while  $\text{H}_3\text{O}^+$  and  $\text{NH}_4^+$  are not.
  - Transition elements are Metallic in nature.
  - Transition elements formed coloured compound.
  - Most of the transition metals are para magnetic.
- Write down the chemical equations of the following:
  - Action of heat on Lunar caustic
  - Action of heat on Blue Vitriol
  - Reaction between  $\text{AgNO}_3$  and  $\text{NH}_3$
  - Reaction between  $\text{CuSO}_4$  and KI
- Complete and balance following equations:
 

$* \text{K}_2\text{Cr}_2\text{O}_7 + \text{KOH} \longrightarrow$	$* \text{CuFeS}_2 + \text{O}_2 \longrightarrow$
$* \text{K}_2\text{CrO}_4 + \text{H}_2\text{SO}_4 \longrightarrow$	$* \text{KMnO}_4 + \text{Heat} \longrightarrow$
- Write short note on: \* Photography \* Silvering of Mirror \* Lunar Caustic
- What is blister copper? Give the process of refining of blister copper.
- Write IUPAC names of the following complex compounds:
  - $\text{K}_4[\text{Fe}(\text{CN})_6]$  \*  $[\text{Co}(\text{H}_2\text{O})_6]\text{SO}_4$  \*  $\text{KMnO}_4$  \*  $[\text{Pt}(\text{CN})_6]^{2-}$  \*  $\text{K}_2[\text{Ti}(\text{OH})_4]$
  - $[\text{Co}(\text{en})_3]\text{Cl}_3$  \*  $\text{NH}_4[\text{Cr}(\text{NCS})_4(\text{NH}_3)_2]$  \*  $\text{Ni}(\text{CO})_4$  \*  $[\text{Cu}(\text{NH}_3)_5\text{Cl}]\text{NO}_3$
  - $\text{K}_2\text{Cr}_2\text{O}_7$  \*  $\text{Na}_2[\text{Zn}(\text{OH})_4]$

**REACTION CONVERSIONS**

- Potassium dichromate with Sulphuric acid concentrated.
- Ionic equations showing that  $\text{KMnO}_4$  is oxidizing agent.
- Formation of chromyl chloride gas.
- Electrolytic oxidation of Potassium Magnate ( $\text{K}_2\text{MnO}_4$ ).
- Silver bromide with sodium thio sulphate.
- $\text{CuSO}_4$  added KI.
- Potassium magnate heated with  $\text{Cl}_2$ .

**PART-II (ORGANIC CHEMISTRY)****CHAPTER NO. 6 :**

- What are the natural sources of organic compounds. Discuss coke in detail.
- What do you understand by isomerism? Discuss its various types with suitable examples.
- Write a note on: \* Cracking \* Polymerization \* Refining of petroleum
- Write IUPAC names of the following organic compounds:
  - $\text{CH}_3\text{-CH}(\text{C}_2\text{H}_5)\text{-CH}(\text{CH}_3)\text{-CH}_3$  \*  $\text{CH}_2=\text{CH-CH}_2\text{-C}(\text{CH}_3)=\text{CH}_2$
  - $\text{C}_2\text{H}_5\text{-CH}(\text{CH}_3)\text{-CH}=\text{CH}_2$  \*  $(\text{CH}_3)_4\text{C}$  \*  $\text{CH}-\text{C}-\text{CH}_2-\text{CH}-\text{CH}_2$
- Draw structures of the following:
  - 1,3-pentadiyne \* 1,3,5-hexatriene \* 3-ethyl-2-methylpentane \* iso-pentane

CHAPTER NO. 7:

- Discuss MOT of Benzene or Ethene or Methane.
  - What is Markownikoff's rule? Explain with suitable examples.
  - Distinguish following pairs of organic compounds by simple chemical test:
    - \* Alkane and Alkene
    - \* Aliphatic and Aromatic compound
    - \* Alkane and Alkyl halide
    - \* Ethane and Ethyne
    - \* Saturated & unsaturated hydrocarbon.
  - What is Wurtz reaction? Write equations for the formation of hydrocarbon by the action of sodium metal on:
    - \* Methyl Iodide
    - \* Ethyl Chloride
    - \* 2-bromobutane
    - \* 2-methyl-2-iodopropane
  - Give equation of the following:
    - \* Hydrolysis of Methyl Magnesium Iodide
    - \* Combustion of Ethane
    - \* Dehalogenation of vicinal-dichloroethan
    - \* Reaction of ethane/ethene with KMnO<sub>4</sub>
    - \* Acetylene reacts with water in presence of HgSO<sub>4</sub> and H<sub>2</sub>SO<sub>4</sub> at 75°C
    - \* Ethyne reacts with hot KMnO<sub>4</sub>
    - \* Oxidation of Benzene
    - \* Nitration of Benzoic acid
    - \* Preparation of Benzene from Hexane
  - Complete and balance following equations:
 

* C <sub>2</sub> H <sub>4</sub> + S <sub>2</sub> Cl <sub>2</sub>	$\longrightarrow$	* C <sub>2</sub> H <sub>2</sub> Br <sub>2</sub> + KOH
* C <sub>2</sub> H <sub>5</sub> Br + KOH	$\longrightarrow$	* C <sub>2</sub> H <sub>2</sub> + KMnO <sub>4</sub> (cold)
* C <sub>2</sub> H <sub>2</sub> $\xrightarrow{\text{organ-nickle catalyst}}$		* C <sub>6</sub> H <sub>6</sub> + CH <sub>3</sub> COCl

AlCl<sub>3</sub>
  - How will you prepare:
 

* Benzene from Phenol	* Red solid from Ethyne
* m-nitrotoluene from Benzene	* Benzoic acid from Benzene
* Benzene from ethane	* O-Chlorobenzoic acid from Phenol
  - What objections are raised on Kakule's structure and how is it defended?
  - Discuss the acidic property of ethyne.
  - Why benzene undergoes electrophilic substitution? Discuss stepwise reaction mechanism of nitration of benzene or Friedel Croft's alkylation.



## **CHAPTER NO. 8 :**

- What are alkyl halides? How are they classified?
  - What are Organometallic compounds? How Grignard's reagent prepare and how will you prepare following from Grignard's reagent:
    - \* Acetic acid   \* Ethane   \* Iso-propyl alcohol   \* Ter-butyl alcohol
  - Explain the mechanism of SN-1 and SN-2 reactions with example.
  - Give equations for the following reactions:
    - \* Reaction between  $\text{CH}_3\text{Cl}$  and  $\text{NaOH}$    \* Reaction between  $\text{C}_2\text{H}_5\text{Br}$  and  $\text{KOH}$  in presence of alcohol.
    - \* Reaction of Ter-butyl chloride with sodium cyanide
    - \* Reaction of Ethyl alcohol with Thionyl chloride
  - What do you understand by Carbonium ion? Discuss stability of various types of carbonium ions.
  - Define and discuss  $\beta$ -Elimination reactions with its reaction mechanism.
  - Outline the stepwise reaction mechanism of the following:
    - \*  $\text{SN}^2$  reaction between bromoethane and  $\text{NaOH}$
    - \*  $\text{SN}^1$  reactions between 2-chloro-2-methyl propane and  $\text{NaCN}$
  - Write only the equation of the following:  
Action of  $\text{KHS}$  on  $\text{CH}_3\text{Br}$ .

## CHAPTER NO. 9 :-

- What are alcohols? Classify monohydric alcohols.
  - With the help of balanced chemical equation explain acidic behavior of:
    - \* Phenol
    - \* Vinegar
    - \* Ethyne
  - Give equation of the following:
    - \* Reduction of Acetone
    - \* Esterification
    - \* Nitration of Phenol with concentrated Nitric acid

- \* Formation of Oxime form Formaldehyde
- \* Ether formation from Ethyl alcohol
- \* Acetyl chloride reacts with Acetic anhydride
- \* Acetic acid heated at  $500^{\circ}\text{C}$  in presence of  $\text{MnO}_2$
- Give a brief account on 'Cannizaro's reaction'.
- Draw the structure and give IUPAC names of following compounds:
  - \* Adipic acid \* Valeric acid \* TNT \* Catechol \* Glucose
  - \* Di-isopropyl Ether \* Oxalic acid \* Formalin \* Wood Spirit
- Complete and balance following equations:
 

$\text{* C}_2\text{H}_5\text{OH} + \text{PCl}_3$	$\longrightarrow$	$\text{* C}_2\text{H}_5\text{Cl} + \text{Ag}_2\text{O}$	$\longrightarrow$
$\text{* (HCOO)}_2\text{Ca} + \text{Heat}$	$\longrightarrow$	$\text{* HCHO} + [\text{Ag}(\text{NH}_3)_2]\text{OH}$	$\longrightarrow$
$\text{* CH}_3\text{COCH}_3 + \text{I}_2 + \text{Na}_2\text{CO}_3$	$\longrightarrow$	$\text{* CH}_3\text{COCl} + \text{NH}_3$	$\longrightarrow$
- Define Fermentation: How can ethanol be prepared from molasses by fermentation?
- What happens when:
  - Ethanol, in excess, is heated with  $\text{H}_2\text{SO}_4$  (conc.)
  - Ethanol is heated with ethanoic acid in the presence of  $\text{H}_2\text{SO}_4$  (conc.)
- How is methyl alcohol prepared from water gas.
- How will you obtain:
  - Acetaldehyde from ethyl alcohol
  - Acetone from acetic acid
- How is acetic acid converted into:
  - Amide
  - Ester
- Discuss Aldol condensation.

### CHAPTER NO. 10 :

- Define following terms:
 

$\text{* Amino acids}$	$\text{* Lipids}$	$\text{* Rancidification}$
$\text{* Saponification}$		
- What are carbohydrates? How are they classified? Give its biological importance.
- What are enzymes? Discuss its classification.
- Differentiate between: \* Oil and fats \* Reducing and Non-reducing sugars

### CHAPTER NO. 11 :

- What are plastics? What is the difference between Thermoplastics and thermosetting plastics? Write the structure of Bakelite with its two uses.
- Write a note on: \* Glass \* Paints \* Fertilizers

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

### COMPUTER SCIENCE – XII

#### Important Information:

Information for MCQs (Section – A)

It is not possible to suggest important MCQs but for the preparation of MCQs read your syllabus book, attempt all MCQ's of last 25 years and do preparation of all MCQ's which are provided by your teacher.

#### Option I (Programming Using C) Section A

"Solve all MCQs of Five Years.

#### Section B (Short Questions Answers)

1. What are the main steps to develop a program?
2. Write the programming error which is detected at the time of compilation
3. What is meant by case-sensitive language? Give one example.
4. Write the basic Structure of a C Program
5. What is "#define". Give one example.
6. What is IDE (Integrated Development Environment)
7. Define the Rules for declaring Identifiers.
8. Define any three Escape sequences in C with examples.
9. Define any three Format Specifiers / Conversion with examples
10. Write the Precedence OR Hierarchy of Operators in C
11. Define any two Standard Library Functions Or Built in functions
12. What is address of operator (ampersand &)?
13. Explain Unconditional control transfer (goto).
14. Define "if-else" selection/conditional control structures in C
15. What is a function? Write its three uses.
16. What is a Function Prototype/Declaration?
17. Define any three File opening modes
18. What is a data file?
19. Define fscanf() function
20. Define fclose() function
21. What is a binary file?
22. What are the Benefits/advantages/uses of Database?
23. Define Primary Key (PK)
24. Define Foreign Key (FK)
25. Who is a Data Base Administrator (DBA)? Enlist his three responsibilities
26. What is a Table Relationship? Name different types of relationships in Database
27. What are the Components of DBMS?

#### Solve 5 years conversion of mathematical expression into "C" expressions

#### Differentiate Between

1. Switch and else-if
2. While and do while loop
3. Break and continue
4. Local and Global variable
5. Primary key and Foreign key

## Debug the program (Remove syntax errors)

```
Main()
int age ;
float height ;
scanf("%c", age);
scanf("%d",&height);
printf("\n %s",age);
printf("\n %.2f",height);
```

```
void main(void)
{
    int i , a=0;

    for(i==1;i<=10 ; i++)
        printf("\n %d",i);

}
```

Write the output of the following programs

```
void main(void)
{
    int i,j;

    clrscr();
    for (i=1;i<=5;i++)
    {
        for (j=1; j<=i;j++)
            printf("%d",j);

        printf("\n");
    }
    getch();
}
```

```
void main(void)
{
    int i;
    double number, sum = 0.0;
    for(i=1; i <= 10; ++i)
    {
        printf("Enter a n%d: ",i);
        scanf("%lf",&number);
        if(number < 0.0)
        {
            break;
        }
        sum += number; // sum = sum + number;
    }
    printf("Sum = %.2lf",sum);
}
```

## Section C

## (Detailed Questions Answers)

1. What is data? Explain basic data types in "C".
2. What is a Repetitive Control Structure (Loop)? Define its different types of in "C" with syntax.
3. What is meant by I/O functions? Explain any two I/O functions in "C" with an example.
4. Explain switch with syntax and an example.
5. Explain the basic operators used in "C" programs.
6. What are the steps to write a program/software?
7. What is a database? Write its advantages.
8. Explain various data types used in MS ACCESS.
9. What is a Database Model? Explain its different types
10. Explain the main Objects in MS ACCESS? Explain
11. Explain the Components of DBMS.

## Some important programs

1. Factorial of number (with and without function)
2. Find the largest number among three inputted numbers
3. Table of any inputted number.
4. List of Even or Odd numbers
5. Find the sum and average of five entered numbers.

Write a program using any loop to draw these patterns.

(a)	(b)	(c)
*****	1	12345
*****	22	123
****	333	12
***	4444	1
**	55555	

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

ENGLISH – XII

### SECTION “A” (COMPULSORY) (MULTIPLE CHOICE QUESTIONS)

Note: Secure full marks through reading the literature i.e. Prose, Poems and Plays thoroughly.

### SECTION “B” (SHORT-ANSWER QUESTIONS)

#### Sub Section (I) Intermediate English Book II

1. How does James Jeans justify his assertion that the universe appears to be actively hostile to life like our own?
2. Give a brief character sketch of the killer or the justify killing with reference to the play Twenty Minutes with Mrs. Oakentubb.
3. Whose suitcase plays vital role in taking revenge in the play “Twenty Minutes with Mrs. Oakentubb? Discuss.
4. Why did the meeting with Korean girl give the man a purpose to live in Twenty Minutes with Mrs. Oakentubb?
5. Why does Bertrand Russel consider it useless to resist industrialization?
6. What do you understand by the term “The Spinning Wheel”? Did Ghandi remain successful in restoring the Spinning Wheel?
7. What do you understand by the term “Cosmopolitanism”?
8. What advice does Bertrand Russell give to the Eastern nations?
9. How did Lieutenant Colonel or Dr. Mallory behave in the story “The Day the Dam Broke”?
10. What is the main theme of the lesson entitled The Day the Dam Broke?  
Or     What do you learn about human behaviour from The Day the Dam Broke?
11. How did Thurber’s mother cope with the situation in The Day the Dam Broke?
12. What do you know about Liaquat Ali Khan with special reference to his speech under the subject of “Pakistan and the Modern World?”
13. What main differences did Liaquat Ali Khan point out between the Muslims and the Hindus beliefs and attitudes in his speech?
14. What purpose, in your opinion is served by beginning of the play “Act III of the Silver Box” with the case of the Livens girls, which has nothing to do with the main story?
15. What system is criticized by the author in the lesson “Act III of the Silver Box?”
16. Was the trial of Jones fair? State the reasons.
17. Who was Schopenhauer? What was his famous saying according to the lesson “The World as I See It”?
18. What is Einstein’s attitude towards war? What forces or elements does Einstein blame for the persistence of war?
19. Why was the story of Hans and the Miller was applicable to the Water-rat?
20. What reasons do you have to say that the Miller was a selfish person? What was the worst example of his nature?  
Or     Was the Miller best friend of Hans? Answer with reasons.

#### Sub Section (II) Selections from English Verses

1. What does Wordsworth guess about the theme of the girl’s song in the poem, The Solitary Reaper?
2. Describe the incident that inspired Wordsworth to compose the poem, The Solitary Reaper.
3. What is the central idea of the poem, The Seven Ages of Man?
4. What is the status of men and women in this world according to William Shakespeare?
5. State the seven ages of man and briefly describe the second, third, fourth, fifth and seventh stages in The Seven Ages of Man?
6. Give the main idea of the poem, The Man of Life Upright.

7. Why does the heart of an upright man be guiltless and free from all dishonest deeds?
8. Why does the heart of an upright man not feel any thought of vanity?
9. How did Samson take revenge from his enemies?
10. Why does Alaxender Pope consider death as a great teacher?
11. Why does the poet ask man to make hope for a better future in the poem "Lines from an Essay on Man"?
12. What is meant by Elegy? Describe the main idea of the poem An Elegy Written in a Country Churchyard.
13. What things of beauty did Keats find most inspiring in the poem, Endymion?
14. "A THING OF BEAUTY IS A JOY FOREVER". Explain the line in your own words.
15. Describe the moral of the poem "Say Not the Struggle Naught Availeth"?
16. What message does the poet, Alfred Tennyson, want to convey through the symbolic character of Ulysses?
17. What message have you extracted from the poem Lost Star, composed by G. Allana?

#### Sub Section (III) Prisoner of Zenda

1. How did Black Michael kidnap the King? What precaution did he take to keep him safely imprisoned?
2. "Rupert is really a dare-devil". Comment.
3. Who persuaded Rudolf Rassendyll to impersonate the King and why?
4. Give an account of the coronation taken place at the Cathedral and describe Rassendyll's behavior at it.
5. Why did Antonette de Mauban send a letter to Rudolf Ressendyll? Describe the letter.
6. What did Antonette de Mauban tell Rudolf Ressendyll in the meeting with him at the summerhouse?
7. Briefly narrate the "Tea Table Incident".  
Or      Describe Rudolf's encounter with armed men during his meeting with de Mauban.
8. What arrangement did Colonel Sapt and Fritz make for restoring the King's popularity among the people of Ruritania?  
Or      Who arranged the ball and why? And what was the outcome of that arrangement?
9. Between Black Michael and Rupert of Hentzau which character strikes you as more devilish? Give reasons.
10. What does Rudolf Ressendyll feel after his meeting with Princess Flavia at the ball?
11. What instructions did Rudolf Ressendyll give to Marshall Strakencz as the King?
12. How did Rudolf Rassendyll make a reconnaissance to the Castle of Zenda in order to view the plan of attack?  
Or      What was the Jacob's ladder? Give an account of the first attempt of Rassendyll at it?
13. How did Johann help Rudolf Rassendyll to prepare his final plan of attack at the Castle of Zenda?
14. What plan does Rudolf prepare to attack the Castle of Zenda after receiving information from Johann?
15. How did Rassendyll liberate the real king from the prison?
16. How was Black Michael killed unexpectedly?
17. How does Princess Flavia learn that Rudolf Rassendyll is not the real King? And how did she behave after that?
18. Elaborate the chapter "If Love Were All".
19. Give an account of Rupert's attempt on Rassendyll life at Tarienheim?
20. How did Rassendyll liberate the real king from the prison?
21. Compare and contrast Rudolf Rassendyll and Rudolf Elphberg. Support your answer with evidence from the novel.
22. Show how Flavia sacrifices love and ambition to duty and honor.
23. "Heaven does not always make the right men kings!" said Fritz. Do you think Rassendyll deserves to be the king of Ruritania? If so, why?
24. Colonel Sapt's Wisdom made it impossible for Black Michael to get the throne of the Ruritania Elucidate.
25. Johan plays a vital role in the plot of the novel. Refute or justify your answer briefly.

**Sub Section (IV) Grammar****1. Phrasal verbs:**

back up; back out; bear down; bear out; bear up; bear with; blow out; blow up; break up; break down; break in / into; break out; break off; bring forth; bring about; bring down; bring out; bring up; call for; call in; call off; call on; call at; carry off; carry out; carry on; come round; come over; come about; come cross; come off; come on; come up; drop out; fall for; fall off; fall out; fall through; fall upon; get across; get on; get over; get round; get through; get up; give in; give out; give up; give way; give away; go about; go after; go down; go into; go on; go through; hold on; hold out; hold back; hold up; keep back; keep down; keep on; keep to; lay by; lay down; lay down; look back; look after; look; down; look for; look into; look over; look on; look out; look to; look up; look up to; make after; make for; make away; make out; make up; make fast; make off; pass away; pass for; pass off; pass through; pass out; put across; put by; put down; put forth; put off; put on; put out; put through; put up; put up with; run across; run after; run down; run out; run over; run on; see about; see off; see through; see to; set against; set about / on; set in; set out / off; set up; set to; set aside; show off; stand up; stand by; stand up; take down; take out; take after; take in; take on; take up; take off; throw away; throw up; turn against; turn away; turn down; turn on; turn off; turn out; turn up; turn in; turn upon;

**2. Homophones or pair of words:**

Which, Witch: Banned, Band: Missed, Mist: Plain, Plane: Mail, Male: Mind, Mined: Find, Fined: Weather, Whether: Father, Farther: Oh, Owe: Flower, Flour: Thrown, Throne: Principal, Principle: Where, Wear: Weight, Wait: Weak, Week: Heard, Herd: Berry, Bury: Worn, Warn: Break, Brake: Sail, Sale: Pail, Pale" Scent, Cent: Sent, Piece, Peace: Scene, Seen: Straight, Strait: Knight, Night: Side, Sighed: Stationery, Stationary: Meet, Meat: Advice, Advise: Sight, Site: All, Awl: Ail, Ale: Altar, Alter: Aloud, Allowed: Ascent, Assent Adapt, Adopt Birth, Berth Bare, Bear Bail, Bale Ball, Bawl: Beech, Beach: Beat Beet: Bred, Bread: Blew, Blue: Carat, Carrot: Born, Borne: Bolder, Boulder: Boarder, Border: Ceiling, Sealing: Cereal, Serial: Cymbal, Symbol: Cue, Queue Council, Counsel: Carrier, Career: Canvas, Canvass: Dual, Duel: Disease, Decease: Die, Dye: Fair, Fare: Flew, Flue: Grate, Great: Lesser, Lesson: Loose, Lose: Not, Knot: Wring, Ring: Affect, Effect: Allusion, Illusion: Allude, Elude: Amend, Emend: Apposite, Opposite: Apprise, Appraise: Biannual, Biennial: Cemetery, Symmetry: Collision, Collusion: Coma, Comma: Contagious, Contiguous: Corporal, Corporeal: Corps, corpse: Confirm, Conform: Dairy, Diary: Decease, Disease: Diseased, Deceased: Descent, Decent: Defy, Deify: Elicit, Illicit: Emigrant, Immigrant: Eminent, Imminent: Enervate, Innervate: Enumerable, Innumerable: Exorcise, Exercise: Ghostly, Ghastly: Heaven, Haven: Idle, Ideal: Ingenious, Ingenuous: Moan, Mourn: Ordinance, Ordnance: Petrol, Patrol: Potable, Portable: Quiet, Quite: Spacious, Specious: Thrash, Thresh: Urban, Urbane: Venal, Venial: Wreath, Wreathe: Wreck, Wreak:

**3. Words/Phrases meanings**

Memorize unfamiliar or new words or phrases(vocabularies) provided or discussed during the session for English to English meaning used in the given literature i.e. Prose, Poems and Novel.

### **SECTION “C”**

#### **(DETAILED-ANSWER QUESTIONS)**

Note: Attempt all questions from this section. All questions carry equal marks.

1. **ESSAY**\*Census\*Impact of Social Media \*Science - a curse or a blessing \*Inflation  
\*Status of Women in Islam \* Terrorism- a worldwide issue \*PSL 2018\*Natural Disaster \*Muslim Unity

**2. NARRATION**

Practice as directed in the class.

**3. COMPREHENSION**

Practice, as directed in the class.

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

**MATHEMATICS – XII****Important Information:**

Information for MCQs (Section – A)

It is not possible to suggest important MCQs but for the preparation of MCQs read your syllabus book, attempt all MCQ's of last 10 years and do preparation of all MCQ's which are provided by your teacher.

**CHAPTER NO. 1 (Function and Limits)**

- |         |                                 |
|---------|---------------------------------|
| Ex: 1.3 | Q. 6, 7, 8                      |
| Ex: 1.5 | Q.4, 5, 6, 7                    |
| Ex: 1.6 | Q.12, 13, 14, 15, 16, 17        |
| Ex: 1.7 | Q.3, 6, 7, 8, 9, 10, 12, 14, 15 |

**CHAPTER NO. 2 (The Straight Line)**

- |         |  |
|---------|--|
| Ex: 2.1 | Q. 4, 14   |
| Ex: 2.2 | Q. 8, 9, 10, 12, 13, 14, 17, 19, 23, 24                |
| Ex: 2.3 | Q. 1, 5, 7, 9, 10                                      |
| Ex: 2.4 | Q. 9, 10, 11, 12, 13, 16, 18, 19, 20                   |
| Ex: 2.5 | Q. 5, 6, 7, 9, 10, 11, 12, 13, 15, 16(iii), 17, 19, 20 |

**CHAPTER NO. 3 (The General Equations of Straight Lines)**

- |         |   |
|---------|---|
| Ex: 3.1 | Q. 1(i), 7, 10, 11, 14, 15, 17, 18, 19, 21(ii)    |
| Ex: 3.2 | Q. 2, 4, 7, 8, 13, 14, 15, 17, 19, 20, 21, 22, 23 |
| Ex: 3.3 | Q. 6, 7   |

**CHAPTER NO. 4 (Differentiability)**

- |         |                           |
|---------|---------------------------|
| Ex: 4.1 | Q. 1(iv,v,vi,vii,viii,ix) |
| Ex: 4.2 | Q. 5                      |
| Ex: 4.3 | Q. 6, 7, 8, 9             |
| Ex: 4.4 | Q. 4, 5, 6, 13            |

**CHAPTER NO. 5 (Application of Differential Calculus)**

- |         |                        |
|---------|------------------------|
| Ex: 5.1 | Q. 2, 3, 4             |
| Ex: 5.2 | Q. 2, 3, 5, 7          |
| Ex: 5.3 | Q. 2, 6, 7, 11, 15, 17 |

**CHAPTER NO. 6 (Antiderivatives)**

- |           |  |
|-----------|--|
| Ex: 6.1   | Q. 14, 20  |
| Ex: 6.3   | Q. 1 (xiv, xv), Q.3 (xiv, xv, xvi)<br>Q.5 (iv, v, viii, ix, xi, xii, xiii) |
| Ex: 6.4   | Q. 9, 11, 12   |
| Ex: 6.5   | Q. 1, 2, 4, 5, 6, 7, 8   |
| Ex: 6.6   | Q. 4, 8, 10  |
| Ex: 6.7   | Q. 1 (iii, iv, v, vi, ix), 3(iii, xi)                                      |
| Ex: 6.9   | Q. 5, 6, 14  |
| Ex: 6.10  | Q. 4, 5, 6, 7, 11, 12  |
| Ex: 6.11  | Q. 16, 17, 18, 19, 20, 21, 22, 23, 24, 25                                  |
| Misc. Ex. | Q. 23  |

**CHAPTER NO. 7 (Circle)**

- |         |                                       |
|---------|---------------------------------------|
| Ex: 7.1 | Q. 3, 8, 10, 14, 15, 16, 17, 18, 20   |
| Ex: 7.2 | Q. 3, 4, 7, 8, 10, 12, 14, 20, 21, 22 |

**CHAPTER NO.8 (Parabola, Ellipse and Hyperbola)**

- |         |   |
|---------|---|
| Ex: 8.1 | Q. 2 (v, vi), 5, 6,                       |
| Ex: 8.2 | Q. 1, 2, 3, 5, 7, 8, 9                    |
| Ex: 8.3 | Q. 1, 2, 4                                |
| Ex: 8.4 | Q. 1, 2, 3, 6, 13, 16, 17, 18, 21, 22, 30 |

**CHAPTER NO. 9 (Vectors)**

- |         |                  |
|---------|------------------|
| Ex: 9.1 | Q. 5             |
| Ex: 9.3 | Q. 11, 12, 13    |
| Ex: 9.4 | Q. 5             |
| Ex: 9.5 | Q. 3, 9, 10, 11  |
| Ex: 9.6 | Q. 1, 2, 3, 4, 5 |
| Ex: 9.7 | Q. 2, 5, 6       |

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

PAKISTAN STUDIES-XII

### Section- B (Short Questions)

- (i) Name four castes of Hindu society and explain them briefly.
- (ii) Name four sufi orders of Muslim society and explain them briefly.
- (iii) Explain the difference between Two Nation Theory and Ideology of Pakistan.
- (iv) Write four points of Quaid-e-Azam's fourteen points.
- (v) What was the scheme of Cabinet Mission Plan?
- (vi) Write few sentences on the role of Sindh or Punjab in the struggle for Independence.
- (vii) Write four important points of Indian Independence Act 1947.
- (viii) What was the Indus Basin Treaty?
- (ix) Write four important features of Objective Resolution 1949.
- (x) Name Climatic regions of Pakistan and explain briefly.
- (xi) Write eight sentences about Geo-political importance of Location of Pakistan.
- (xii) Write four differences between the Northern and Western mountains of Pakistan.
- (xiii) Write the aims and objects of All India Muslim League.
- (xiv) Write eight sentences about Indus Valley Civilization.
- (xv) Give differences between Hindu and Islamic Societies.
- (xvi) Write a brief note on any regional language of Pakistan.
- (xvii) Write eight sentences about importance of economic planning in Pakistan.
- (xviii) Write a brief note on Non-Aligned Movement.
- (xix) Write four important natural resources of Pakistan.
- (xx) State any four Agricultural Problems of Pakistan.
- (xxi) Describe any five differences between in Rural and Urban Society of Pakistan.
- (xxii) Mention four salient features of culture of Pakistan.
- (xxiii) Write eight sentences on importance of Urdu as National language.

### Section- C (Detailed Questions)

1. Describe the political, social, cultural and religious impacts of Islam on Hindu society.
2. Elaborate Ideology of Pakistan in the light of the sayings of Quaid-e-Azam Muhammad Ali Jinnah.
3. Discuss important political events during 1930 to 1947.
4. Discuss the Initial problems of Pakistan.
5. The role of Quaid-e-Azam Muhammad Ali Jinnah in consolidation of Pakistan.

OR

6. The role of Quaid-e-Azam as Governor General of Pakistan.
7. Why did the Muslim of sub-continent demand a separate home land?
8. Give Islamic Provisions in constitution of Pakistan 1973.
9. Describe reasons of separation of East Pakistan from West Pakistan in 1971.
10. What is cultural heritage of Pakistan? Explain in the light of historical perspective.
11. What are the fundamental principles of the foreign policy of Pakistan?

# آدمی کو چنگ سینٹر

تیاری پرچہ برائے امتحانات ۷۰۱۸-۲۰۱۸

مطالعہ پاکستان۔ بارہویں جماعت (سائنس گروپ)

اہم ہدایات برائے حصہ الف (کشیر الامتحانی سوالات)

- ۱۔ ہندوؤں کی چار رذائلوں کے نام لکھیں اور مختصر اوضاحت کریں۔
- ۲۔ تصوف کے چار سلسلوں کے نام تحریر کریں اور مختصر اغارف بھی پیش کریں۔
- ۳۔ دو قومی نظریہ اور نظریہ پاکستان کے درمیان فرق واضح کریں۔
- ۴۔ قائد اعظم محمد علی جناح کے چودہ نکات میں سے چار نکات تحریر کریں۔
- ۵۔ کاپینہ مشن منصوبہ کیا تھا۔
- ۶۔ جدوجہد آزادی میں سندھ یا پنجاب میں سے کسی ایک کے کردار کو چند جملوں میں واضح کریں۔
- ۷۔ قانون آزادی ہند کے کے کوئی چار اہم نکات تحریر کیجئے۔
- ۸۔ سندھ طاس معاملہ کیا تھا؟
- ۹۔ قرار و اوصاص ۱۹۷۳ء میں چار خصوصیات بیان کریں۔
- ۱۰۔ پاکستان کے موسمیاتی خلدوں کے نام لکھیں اور مختصر اوضاحت کیجئے۔
- ۱۱۔ پاکستان کے محل و قوع کی اہمیت پر آٹھ جملے تحریر کریں۔
- ۱۲۔ پاکستان کے ثالی پہاڑی سلسلوں اور مغربی پہاڑی سلسلوں کے درمیان چار فرق تحریر کیجئے۔
- ۱۳۔ آل اٹیا مسلم لیگ کے قیام کے اغراض و مقاصد بیان کریں۔
- ۱۴۔ وادی سندھ کی قدیم تہذیب پر آٹھ جملے تحریر کریں۔
- ۱۵۔ ہندو اور مسلم معاشروں کے درمیان چار فرق واضح کریں۔
- ۱۶۔ پاکستان کی کسی ایک علاقائی زبان پر مختصر نوٹ تحریر کریں۔
- ۱۷۔ پاکستان میں معاشی منصوبہ بندی کی اہمیت پر آٹھ جملے تحریر کیجئے۔
- ۱۸۔ غیر وابستہ ممالک کی تحریک پر مختصر نوٹ لکھیں۔
- ۱۹۔ پاکستان کے چار اہم قدرتی وسائل تحریر کریں۔
- ۲۰۔ پاکستان کے چار زرگی مسائل تحریر کریں۔
- ۲۱۔ پاکستان کی دیہی اور شہری زندگی کے درمیان چار فرق اجاگر کیجئے۔
- ۲۲۔ پاکستانی ثقافت کی چار نمایاں خوبیاں تحریر کریں۔
- ۲۳۔ قومی زبان کی حیثیت سے اردو کی اہمیت پر آٹھ جملے تحریر کیجئے۔

## Section: 'C'

- ۱۔ ہندوستانی معاشرہ پر اسلام کے سیاسی، سماجی، مذہبی اور معاشری اثرات کا جائزہ لے جئے۔
- ۲۔ نظریہ پاکستان کی وضاحت قائدِ عظم کے بیانات کی روشنی میں جائزہ لے جئے۔
- ۳۔ ۱۹۴۷ء سے ۱۹۷۳ء تک ہندوستان میں ہونے والے اہم سیاسی واقعات کا احاطہ کر جئے۔
- ۴۔ قائم پاکستان کے بعد پاکستان کو درپیش ابتدائی مسائل کا جائزہ لیں۔
- ۵۔ اسحاق ام پاکستان کے لیے قائدِ عظم مجرم علی جناح کی خدمات کا احاطہ کر جئے۔ یا بھیشت گورنر جنرل قائدِ عظم کے کردار کا جائزہ لیں۔
- ۶۔ بر صیر کے مسلمانوں نے علیحدہ وطن کا مطالبہ کیوں کیا؟
- ۷۔ آئین پاکستان ۱۹۷۳ء کی اسلامی و فتحات تحریر کریں۔
- ۸۔ ۱۹۷۱ء میں مغربی پاکستان سے شرقی پاکستان کی علیحدگی کے اسباب بیان کر جئے۔
- ۹۔ پاکستان کا ثقافتی ورثہ کیا ہے؟ تاریخ کے تناظر میں وضاحت کر جئے۔
- ۱۰۔ پاکستان کی خارجہ پالیسی کے بنیادی اصول کیا ہیں۔

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# ADAMJEE COACHING CENTRE

## Preparation Paper 2017-2018

**PHYSICS – XII****Important Information:**

1. \*\* means that topic is very important for Section "B".
2. \* means that topic is important for Section "C".
3. Without any sign means that you have to prepare to decrease the risk factor.
4. Information for MCQs (Section – A)  
It is not possible to suggest important MCQs but for the preparation of MCQs read your syllabus book, attempt all MCQ's of last 25 years and do preparation of all MCQ's which are provided by your teacher.

**CHAPTER 11: Heat****Questions & Scientific Reasons:**

1. \*\*Define heat engine. Write & explain four different operations of Carnot Engine. Draw its graph and derive formula for its efficiency.
2. \*\*Define  $C_p$  and  $C_v$ . Also prove that  $C_p - C_v = R$ .
3. \*Define " $\alpha$ " and " $\beta$ ", prove that  $\beta = 3\alpha$
4. \*\* State & explain First law of thermodynamics. On the basis of this law, explain different process.
5. \*Calculate the value of  $C_p$  and  $C_v$  for monoatomic gas. Why  $C_p$  is greater than  $C_v$ ?
6. \*Show that the absolute temperature of an ideal gas is directly proportional to the average translational kinetic energy of the molecules.
7. \*What do you mean by Entropy? Describe the second law of thermodynamics in terms of Entropy.
8. When a block with a hole in it is heated, why does the material around the hole not expand into the hole and make it small?
9. \*What happen to the temperature of room in which an air conditioner is left running on a table in the middle of the room?
10. \*Define linear expansion. How does the concept of linear expansion help the fabrication of bimetallic strips? Explain the working of bimetallic strips in a thermostat.
11. \*State two statements of second law of thermodynamics. Also prove that both are equivalent.
12. \*Define heat engine. Prove that efficiency of a heat engine always be less than 100%.

**Problems Exercise:** Problem #: \*11.1, \*11.3, \*11.4, \*11.6, \*11.9 and \*11.11

**Solved Example:** Example #: \*11.2, \*11.5,

**Past Papers:** \*2006 Q1 (d), 2009 Q2 (d), 2008 Q1 (d), 2008 Q2 (d), 2007 Q2 (d)

**CHAPTER 12: Electrostatics****Questions and Scientific Reasons:**

1. \*\*State and prove Gauss's Law. By using this law, derive formula for field intensity of large +ve charge sheet or spherical surface.
2. \* Derive an expression for absolute electric potential.
3. Explain electric flux. Under what conditions will the flux through the surface be? (i) zero (ii) maximum

**Problems Exercise:** Problem #: 12.1, \*12.2, 12.6, \*12.9, \*12.10, \*12.11, \*12.15, \*12.17, \*12.19  
\*12.20, \*12.22

**Solved Example:** Example #: \*12.3

**Past Papers:** 2009 Q3 (d), 2008 Q3(d) and 2006 Q3 (d); 2015 Q2 (x)

**Extra Question:** \*Question of Gauss's law by using  $E = F/q$  and  $E = \sigma/2\epsilon_0$

**CHAPTER 13: Current Electricity****Questions and Scientific Reasons:**

1. \*Define potential difference and electromotive force. Both are measured in volts. What is the difference between these concepts? Also derive the relevant expression.
2. \*State Ohm's law. How is the resistance of the conductor related to its dimensions?

- Problems Exercise:** Problem #: 13.2, \*13.7, \*13.8, \*13.10, \*13.12, \*13.16, \*13.17, \*13.18, \*13.19, \*13.21 and \*13.22.
- Solved Example:** Example #: 13.5, 13.7, 13.10 and 13.14
- Past Papers:** 2009 Q6 (d) and 2008 Q4 (d); 2012 Q2 (i)

### CHAPTER 14: Magnetism and Electromagnetism

#### Questions and Scientific Reasons:

1. \*\* Explain e/m ratio, J.J. Thomson experiment.
2. \*\* What is transformer? On what principle does it work? What is the difference between a step-up, step-down and unity transformer? Establish a mathematical relation among different characteristics of a transformer.
3. \*\* Draw a labeled diagram of an AC generator and derive expression for the alternating voltage produced.
4. \*\* State Faraday's law and Lenz's law. By using this law explain self or mutual induction.
5. \*Explain induced torque in a rectangular coil. Description required.
6. \*Why is a soft iron core used in a transformer?
7. \*What is flux density and how it is related to the number of lines of induction expressed in webers?
8. \*Define Motional emf and derive the relevant formula.

**Problems Exercise:** Problem #: \*14.1, 14.4, \*14.6, \*14.7, \*14.11, \*14.12, \*14.14, \*14.15

**Solved Example:** Example #: 14.3, 14.6, 14.9 and 14.10.

**Past Papers:** \*2008 Q5 (d), 2009 Q4 (d), 2007 Q4 (d), 2006 Q5 (d); 2013 Q2 (iv); 2012 Q2 (ii); 2011 Q2 (xiii)

#### Extra Question:

1. \*Numerical of ampere's law by using  $Bl = \mu_0 Nl$
2. \*Numerical of motional emf by using formula  $V = Blv$

### CHAPTER 15: Electrical Measuring Instruments

#### Questions and Scientific Reasons:

1. \*/\*\* Define balanced Wheat Stone Bridge. Also prove that  $\frac{R_1}{R_2} = \frac{R_3}{R_4}$ .
2. \*With the help of diagram describe, how a galvanometer is converted into an Ammeter and derive an expression for shunt resistance  $R_s$ .
3. \*With the help of diagram describe, how a galvanometer is converted into a Voltmeter and also derive an expression for high resistance ( $R_x$ ).

**Problems Exercise:** Problem #: \*15.2, 15.3, \*15.5 and \*15.7

**Solved Example:** Example #: 15.1

**Past Papers:** 2006 Q6 (d), 2007 Q5 (d), 2008 Q6 (d)

### CHAPTER 16: Electromagnetic Waves and Electronics:

#### Questions and Scientific Reasons:

1. \*What is semiconductor? Differentiate between intrinsic and extrinsic semiconductors.
2. \*How are p-type and n-type semiconductors made? Explain with the help of a diagram the forward and reverse biasing of P-N junction.
3. \*Explain why are the light waves able to travel through vacuum, whereas sound waves can not?
4. \*Define rectifier. Write its types. Explain half wave and full wave rectification.

### CHAPTER 17: Advent of Modern Physics

#### Questions and Scientific Reasons:

1. \*Explain why is Compton effect not observable with visible light.
2. \*In the photo electric effect the energy of a photoelectron is less than that of incident photon. Explain.
3. \*How deBroglie's hypothesis did help to explain the stability of the atom?
4. \*\* Define photoelectric effect. Write down its experimental observations. Explain Einstein's equation for photoelectric effect.

5. \*What are Black Body and Black Body radiation? State the laws governing the Black Body radiation.
6. \*\*State and explain Compton Effect. Derive formula to shift in wave length of light.

**Problems Exercise:** Problem #: \*17.3, \*17.4, \*17.5, \*17.6, 17.8, \*17.10, \*17.12, \*17.13, \*17.15

**Solved Examples:** 17.2, 17.3, 17.13 and 17.14.

**Past Papers:** 2006 Q7(d), 2008 Q8 (d), 2009 Q7 (d); 2013 Q2 (vi); 2011 Q2 (i)

#### Extra Numerical:

1. \*Light of wave length  $4000\text{A}^{\circ}$  to  $7000\text{A}^{\circ}$  falls on metal surface where its work function is  $0.54\text{eV}$ . Calculate stopping potential, velocity of photo electrons and will electrons be emitted or not?

### CHAPTER 18: The Atomic Spectra

**Exercise:** Problem #: \*18.1, \*18.2, \*18.3, \*18.4(a) and \*18.5

**Solved Example:** Example #: 18.1, 18.3 and 18.4

**Past Papers:** \*2008 Q8 (d)

#### Extra Numerical:

1. \*Calculation of shortest and longest wave length of different hydrogen series.
2. \*Calculation of wavelength and wave number when hydrogen atom be ionized.

### CHAPTER 19: The Atomic Nucleus

#### Questions and Scientific Reasons:

1. \*\*Define radioactivity. Explain the law of radioactive decay. Write the equations showing the change in the parent nuclei by  $\alpha$ ,  $\beta$  and  $\gamma$  decay.
2. \*Define nuclear fission reaction. Explain nuclear fission chain reaction.
3. \*It is more difficult to start fusion reaction than fission, why?
4. \*Is it possible that fusion of two small nuclei may occur without collision at extremely high energy?
5. \*Can a conventional fission reactor ever explode like a bomb? Why?

**Problems Exercise:** Problem #: \*19.4, \*19.5, \*19.6, \*19.7, \*19.8 and \*19.10

**Solved Example:** Example #: 19.6

**Past Papers:** 2009 Q8 (d) and 2010 Q2 (viii)

### CHAPTER 20: Nuclear Radiations

#### Questions and Scientific Reasons:

1. \*\*Describe the construction and working of Geiger Muller Counter, what is the difference between Wilson cloud chamber & Geiger Counter.
2. \*Name the different electromagnetic radiations which are capable of producing ionization of atoms? By what process do they usually ionize?
3. \*Lead is heavy and denser than water, yet water is effective shield against neutrons? Explain why?

# آدم جی کو چنگ سینٹر

تیاری پرچہ برائے امتحانات ۲۰۱۸-۲۰۱۷

اردو لازمی - بارھوں جماعت

### حصہ "ب" (مختصر جواب کے سوالات)

سوال نمبر (۲): مدرج ذیل اشعار میں سے دو کی تشریف، شاعر کے حوالے کے ساتھ کریں۔

طريقہ جواب سوال نمبر ۲

اک شعر کی تحریک کے ۵ نمبر ہیں:

حول شاعر انجیل

تشریح

..... جو لئے شاعر میں شاعر کا نام اور ایک لقب تحریر کر دینا کافی ہے۔

☆.....تخریج کے ذیل میں شعر کا نپاری خیال اور فنِ محاسن کی رشان وہی کے ساتھ ہے جسکے پس منظر موزوں الفاظ میں تحریر کیا جائے۔

☆.....ہر شعر کی تشریح میں لازمی طور پر بھرتی کے مسائل شامل کرنے سے گرفتار کیا جائے۔

تشریع کے لیے اہم غزلیات:

- |    |                      |               |
|----|----------------------|---------------|
| ۱- | میر تقی میر          | (دونوں غزلیں) |
| ۲- | خواجہ میر درد        | (دونوں غزلیں) |
| ۳- | مرزا سداللہ خاں غالب | (دونوں غزلیں) |
| ۴- | علام محمد اقبال      | (دونوں غزلیں) |

☆ ☆ ☆

سوال نمبر (۳): (الف) منتخب کردہ اقتیاس کے مصنف اور سابق کاتا نام تحریر کریں۔

(ب) مندرجہ ذیل میں سے کسی ایک انتباہ کی تعریف کریں۔

طريق جواب سوال نمبر ۳

☆.....افتباں کی تحریر چند بنیادی نکات پر مختصر ہوتا ہے، ان نکات کی تحریر ربط و تسلیم کے ساتھ کرنا یادہ نمبر کا مخفیہ بناتا ہے۔

.....حوالہ مصنف میں مصنف کا نام اور ایک لقب تحریر کر دینا بہت کافی ہے۔ تفصیلات کی ضرورت نہیں۔

.....حوالہ سین میں سبق کا نام اور سبق کا خذلکھو دینا کافی ہے۔ اضافی تفصیلات تحریر کرنے پر بھی دوہی نمبر دے جائیں گے۔

## اہم اقتباسات:

نمبر	سین کاتام	اقتباس	نمر شار
۷۱	سیرت محمد ﷺ کی جامیعت	خدا کی محبت کا اہل اور ..... بننے کا ذریعہ نایا ہے۔	۱۔ خدا کی محبت کا اہل اور ..... بننے کا ذریعہ نایا ہے۔
۷۱	سیرت محمد ﷺ کی جامیعت	چنانچہ اسلام میں دو ..... وہ "سنن نبوی ﷺ" ہے۔	۲۔ چنانچہ اسلام میں دو ..... وہ "سنن نبوی ﷺ" ہے۔
۷۲	سیرت محمد ﷺ کی جامیعت	غرض اس دنیا کا نظم و نت ..... نمونے اور مثالیں رکھتا ہے۔	۳۔ غرض اس دنیا کا نظم و نت ..... نمونے اور مثالیں رکھتا ہے۔
۷۲	سیرت محمد ﷺ کی جامیعت	ایک حاکم کے لیے ..... پھولوں کا گلڈستہ ہو۔	۴۔ ایک حاکم کے لیے ..... پھولوں کا گلڈستہ ہو۔
۷۲	سیرت محمد ﷺ کی جامیعت	احد سے برت حاصل کرو۔	۵۔ اگر دولت مند ہو تو ..... احد سے برت حاصل کرو۔
۷۳	سیرت محمد ﷺ کی جامیعت	فلاح مکہ کاظمارہ کرو۔	۶۔ اگر تم استاد اور معلم ہو تو ..... فلاح مکہ کاظمارہ کرو۔
۷۷	حسن الملک	عہدہ برآ ہونا آسان نہیں۔	۷۔ ان میں پارس پھر کی ..... عہدہ برآ ہونا آسان نہیں۔
۷۹	حسن الملک	ان کا ذہن ایسا رسا ..... ان کا لوبہ مان گئے تھے۔	۸۔ ان کا ذہن ایسا رسا ..... ان کا لوبہ مان گئے تھے۔
۷۹	حسن الملک	مخالف بھی مان جاتے تھے۔	۹۔ تقریر کے وقت منسے ..... مخالف بھی مان جاتے تھے۔
۸۰	حسن الملک	دونوں سے کام لیتے تھے۔	۱۰۔ آدمی کے پیچائے میں انہیں ..... دونوں سے کام لیتے تھے۔
۸۳	ڈپی نذرِ راحمہ کی کہانی	کہوں تو بھانستہ ہو گا۔	۱۱۔ آنکھیں چھوٹی چھوٹی ..... کہوں تو بھانستہ ہو گا۔
۸۸	مولانا محمد علی	یہ کس کا فیضان ہے۔	۱۲۔ بعض کہتے ہیں کہ وہ ..... یہ کس کا فیضان ہے۔
۸۹	مولانا محمد علی	ذوبتے ہوئے سورج سے۔	۱۳۔ مرد غاذی کے کارنا موں ..... ذوبتے ہوئے سورج سے۔
۸۹	مولانا محمد علی	سماں کا نقشہ مرتب ہو رہا ہے۔	۱۴۔ کس بلا کے بولنے والے تھے ..... سماں کا نقشہ مرتب ہو رہا ہے۔
۹۱	ملک و ملت کی جگاب	جس کی خود زید کو تلاش ہو۔	۱۵۔ ملک و ملت کی جگاب ..... مولانا محمد علی
۱۰۳	عزم جزم	خود اس کا فیصلہ کرے۔	۱۶۔ جب انسان بچپن کی ..... خود اس کا فیصلہ کرے۔
۱۰۳	عزم جزم	کچھ بھی خیال نہیں۔	۱۷۔ تمام سویاں زڑ ملکوں میں ..... کچھ بھی خیال نہیں۔
۱۰۵	عزم جزم	ظیم الشان ہو جاتا ہے۔	۱۸۔ کوئی زمان انسان پر ایسا ..... ظیم الشان ہو جاتا ہے۔
۱۱۰	اسلام میں گداگری کی نہ مت	سم قاتل کا حکم رکھتا ہے۔	۱۹۔ جس قدر قوم میں بھیک ..... سم قاتل کا حکم رکھتا ہے۔
۱۱۰	اسلام میں گداگری کی نہ مت	کامیابی کا ذریعہ گردانتا ہے۔	۲۰۔ سائل اپنے اندوختے کو ..... کامیابی کا ذریعہ گردانتا ہے۔
۱۱۳	اسلام میں گداگری کی نہ مت	فریب سے آگاہ کرنا چاہیے۔	۲۱۔ زبانی بجلسوں میں گورتوں ..... فریب سے آگاہ کرنا چاہیے۔
۱۵۳	آؤ سبل کر کوشش کریں	ہمارے لیے کوئی نظریہ بن گئی ہے۔	۲۲۔ آج ہماری ماڈی ترقی ..... ہمارے لیے کوئی نظریہ بن گئی ہے۔
۱۵۳	پاکستان میں اس وقت	تعلیمات سے روگروانی کا نتیجہ ہے۔	۲۳۔ آؤ سبل کر کوشش کریں ..... تعلیمات سے روگروانی کا نتیجہ ہے۔
۱۵۳	آؤ سبل کر کوشش کریں	خوشحالی کی جانب گاہزن ہو سکیں۔	۲۴۔ ہمیں چاہیے کہ عالمی ..... خوشحالی کی جانب گاہزن ہو سکیں۔

- [۰۲] سوال نمبر (۳): (الف) درج ذیل نظم کے شاعر کا مختصر تعارف خریر کیجیے۔  
 [۰۶] (ب) درج ذیل نظم کا مرکزی خیال خریر کیجیے۔

.....

- [۰۲] (الف) درج ذیل جز کے شاعر اور نظم کا نام خریر کیجیے۔  
 [۰۶] (ب) درج ذیل جز کی تعریف کیجیے۔

**طریقہ جواب سوال نمبر ۲**

☆..... مرکزی خیال، خلاصے کی طرز پر تفصیلی تحریر نہیں کرنا چاہیے۔  
 ☆..... مرکزی خیال کا مقصد نظم کا بنیادی مضمون بتانا ہے لہذا کم سے کم مواد پر اتفاق کر لیا جائے۔  
 ☆..... مرکزی خیال میں مناسب اشعار کا استعمال مسخن ہے۔

**تعریف کے لیے اہم بند:**

- |                 |                           |
|-----------------|---------------------------|
| ۱۔ بند ۳        | محبوب بھائی               |
| ۲۔ بند ۴، بند ۵ | اسرار اور قدرت            |
| ۳۔ بند ۲، بند ۳ | ٹکسٹ زندگی کا خواب        |
| ۴۔ بند ۲، بند ۳ | حضرت فاطمۃ الزہرا کی رخصی |

**مرکزی خیال کے لیے اہم نظمیں:**

حسن بچارگی	ٹکسٹ زندگی کا خواب	اسرار اور قدرت
	اکبر اور مغلیہ تعلیم	رات اور ریل
	☆.....☆.....☆	☆.....☆.....☆

- [۰۲] سوال نمبر (۴): (الف) منتخب کردہ سبق کے مصنف کا مختصر تعارف خریر کیجیے۔  
 [۰۶] (ب) درج ذیل میں سے کسی ایک سبق کا خلاصہ خریر کیجیے۔

**طریقہ جواب سوال نمبر ۴**

☆..... خلاصے کا مسماط اصل سبق کا تقریباً ایک تہائی ہونا چاہیے۔ اس میں وہ تمام نکات بیان کیے جائیں جن پر کہاں تغیر ہوئی ہے۔  
 ☆..... خلاصے میں مخواہات قائم کرنے سے گریز کیا جائے۔  
 ☆..... اشعار کا استعمال بالکل نہیں ہونا چاہیے، کیوں کہ اشعار لکھنا خلاصے کی روح کے خلاف ہے۔

**خلاصہ کے لیے اہم اسماق:**

مجسم	چور	نیا قانون
	ہمسفر	آرام و سکون

☆.....☆.....☆

[۸] سوال نمبر (۶): اردو انسان یا اردو وزیر اما کی مختصر تاریخ ارتقاء بیان کریں۔

☆.....☆.....☆

[۸] سوال نمبر (۷): شال نصاب غزلیات میں سے دو شعراء کے دو دو اشعار تحریر کیجیے۔ جو پچ میں نہ ہوں۔

.....☆

[۸] مندرجہ ذیل میں سے دو سوالات کے جوابات تحریر کریں۔

اہم سوالات:

(۱) مگوچے اڈے کے لوگوں میں سب سے زیادہ ٹھنڈ کیوں سمجھا جاتا تھا؟

(۲) ڈراما "آرام و سکون" میں سرکاری دفتروں کی حالت پر کیا الطیف طنز کیا گیا ہے؟

(۳) قرآن اور سنت سے کیا مراد ہے؟

(۴) فتح کر کے موقع پر ابوسفیان نے رسول کریم ﷺ کو دیکھ کر کیا کہا تھا اور حضرت عباس رضی اللہ عنہ نے کیا جواب دیا تھا؟

(۵) ایک منتظم اعلیٰ کی حیثیت سے محض الملک میں کیا صفات تھیں؟

(۶) مولوی عبد الحق نے ریاست حیدر آباد کن میں کیا اہم خدمات انجام دیں؟

(۷) مولوی عبد الحق کو بابائے اردو کیوں کہا جاتا ہے؟

(۸) پچھوں کی تعلیم و تربیت کے سلسلے میں ان کے والدین اور مربیوں کو کن باتوں کا خیال رکھنا چاہئے؟

(۹) ہمارے اکثر طالب علموں میں عزم و جزم کیوں پیدا نہیں ہوتا؟

(۱۰) جو لوگ اپنے مستقبل کا فیصلہ امور عارضی پر کرتے ہیں ان کا انجام کیا ہوتا ہے؟

(۱۱) گدگری سے کون کون سی انفرادی اور اجتماعی بر ایکاں جنم لیتی ہیں؟

(۱۲) بیسویں صدی کے آغاز میں ہمارے اردو و ادب کی کیا صور تھاں تھی؟

(۱۳) سجاد حیدر کو انسان نگار کے بجائے انشاء پرواز کہنا کیوں درست ہے؟

(۱۴) تویی زبان کے نہاد کے لئے کیا مشکلات در پیش ہیں؟

(۱۵) ذریعہ تعلیم اردو ہونے سے کیا فائدہ ہوگا؟

(۱۶) قائد اعظم نے مارچ ۱۹۳۸ء میں ڈھاکہ میں اردو کے بارے کیا اعلان کیا تھا؟

(۱۷) شریف کیش نے اردو کے بارے کیا سفارش پیش کی تھی؟

(۱۸) انہیائے کرام نے بنی نوی انسانی کو کس کس پہلو سے سوارنے کی علمی و عملی تعلیمات دیں؟

(۱۹) بے تحاشا اضافہ آبادی سے کون کون سے سائل جنم لیتے ہیں؟

(۲۰) تویی یا مین الاقوا کی سطح پر وسائل میں کس طرح اضافہ کیا جاسکتا ہے؟

(۲۱) ہم کس طرح آبادی اور وسائل میں مناسب توازن رکھ سکتے ہیں؟

(۲۲) ہمارے فضائی ماحول میں کیا خرابیاں پیدا ہوئی جا رہی ہیں؟

☆.....☆.....☆

### حصہ "ج" (تفصیلی جواب کے سوالات)

[۱۵]

سوال نمبر (۸): مندرجہ ذیل میں سے کسی ایک شاعر کے اسلوب پر تبصرہ کریں۔  
طریقہ جواب سوال نمبر ۷

☆..... ۱۵ نمبر کے اس سوال کو تین حصوں پر مشتمل ہونا چاہیے:

۱۔ عمدہ تمہید، تعارف۔

۲۔ دس سے بارہ خصوصیات، سمجھا رہے ہو، ہر خصوصیت کے لیے مناسب شہزاد کر کیا جائے۔

۳۔ تین سے چار مستند ناقدین کی آراء تحریر کی جائیں۔

تبصرہ کے لیے اہم شعراء:

علام اقبال

خواجہ سیر درد

میر ثقیٰ میر

فیض احمد فیض

مرزا اسداللہ خاں غالب

☆.....☆.....☆

[۱۵]

سوال نمبر (۹): مندرجہ ذیل میں سے کسی ایک شرکار کے طرز تحریر پر تبصرہ کریں۔

طریقہ جواب سوال نمبر ۸

☆..... ۱۵ نمبر کے اس سوال کو تین حصوں پر مشتمل ہونا چاہیے:

۱۔ عمدہ تمہید، تعارف۔

۲۔ دس سے بارہ خصوصیات، سمجھا رہے ہو۔ (ہر خصوصیت کے ساتھ شعری مثال کی طرز پر تحریک لکھنا اچھا ہے، ضروری نہیں)

۳۔ تین سے چار مستند ناقدین کی آراء تحریر کی جائیں۔

تبصرہ کے لیے اہم شرکار:

رشید احمد صدیقی

مولوی عبدالحق

مرسید احمد خان

سید سلیمان ندوی

مرزا فرحت اللہ گیگ

☆.....☆.....☆

# ADAMJEE COACHING CENTRE

## Preparation Paper 2017 – 2018

ZOOLOGY - XII

**Important Information:** Remember this is not a guess paper. The preparation paper help you that how you initiate your study

Information for MCQs (Section – A)

For MCQ's read your text book carefully line by line and mark all important points with highlighter.

### Important Questions for Section 'B'

#### CHAPTER NO. 1 (Homeostasis)

**Non reasoning questions:**

- i. What is excretion? How does it occur in *Hydra*, *Planaria*, *Earth-worm* and *Cockroach*? Also mention the excretory product of animals.
- ii. Describe role of hormones in the renal physiology.
- iii. What is thermoregulation? Explain with reference to mammals.

**Reasoning questions:**

- i. Why fresh water fishes produce large quantities of dilute urine?
- ii. Why marine invertebrates and hag-fishes do not have osmo-regulatory mechanism?
- iii. Protonephridia are also called flame cells. Why?
- iv. Nephron processes about 180 liters of filtrate but the kidneys excrete only about 1-2 liters of urine. Why?
- v. How brown fat is important for animals?
- vi. Panting takes place in dogs. Why?
- vii. How are waste products from the blood removed from the body in case of renal failure?
- viii. Why kidney is considered as an excretory organ?

#### CHAPTER NO. 2 (Support & Movement)

**Non reasoning questions:**

- i. What are antagonistic muscles? Name the different sets of such muscles.
- ii. What are the factors that effects muscle contraction?
- iii. Differentiate between:
  - a) *Bones and Cartilages*
  - b) *Exo-skeleton and Endo-skeleton*
  - c) *Axial & Appendicular skeleton*
  - d) *Cardiac & smooth muscle*
- iv. What is a joint? Name different types of joints found in vertebrates.
- v. Describe All or No response OR muscle fatigue?

**Reasoning questions:**

- i. How does a muscle become fatigued?
- ii. Why do muscle become stiff after death
- iii. Why does a red muscle fibre work for a prolonged period while a white muscle fibre suffers from fatigue after shorter work?
- iv. Why muscle cells are usually called muscle fibres?
- v. What happens to the leg muscle of an athlete who runs a marathon race?

**CHAPTER NO. 3 (Co-Ordination & Control)****Non reasoning questions:**

- i. What is reflex action? Explain.
- ii. Differentiate between:
  - a) CNS & PNS
  - b) Diffuse nervous system & Centralized nervous system
  - c) Nervous coordination & Chemical coordination
  - d) Peptide hormone & Steroid hormone
- iii. Write a note on nervous disorders.
- iv. What are neurons? Also explain types of neurons.

**Reasoning questions:**

- i. Why pituitary gland was said to be master gland of the body?
- ii. Why dopamine is given in Parkinson's?
- iii. Why adrenaline is called "Emergency hormone"?
- iv. Why classic conditioning is called double action behavior?

**CHAPTER NO. 4 (Reproduction)****Non reasoning questions:**

- i. What are the three necessities of sexual reproduction?
- ii. Write a note on STDs.
- iii. Give a brief account on Hormonal control of reproductive cycle.
- iv. Difference between:
  - a) Oestrous cycle & Ovarian cycle
  - b) External & internal fertilization
  - c) Oviparous & viviparous
  - d) Spermatogenesis & Oogenesis.
- v. Define:
  - a) Gestation & Implantation
  - b) Placenta, amnion and umbilical cord
  - c) Lactation, Labor, puberty and menopause.

**Reasoning questions:**

- i. Why testes descend down in human male foetus before birth?
- ii. Why monozygotic twins have the same sex?
- iii. Why oxytocin is called "birth hormone"?

**CHAPTER NO. 5 (Growth & Development)****Non reasoning questions:**

- i. Describe cell differentiation or embryonic induction with mechanism.
- ii. What is the role of nucleus and cytoplasm in development?
- iii. What is aging? Explain.
- iv. Write a note on abnormal development.

**Reasoning questions:**

- i. What exactly is happening inside our bodies to bring on the wrinkles, gray hair, and the other changes seen in older people?
- ii. Cleavage in chick is called discoidal type, why?

**CHAPTER NO. 9 (Bio-Technology)**

- i. What are DNA fingerprinting, Genomic library and HGP?
- ii. Write a note on genetic diseases, tissue culture and cloning.

iii. What are the uses and applications of biotechnology in agriculture and medicine?

**Reasoning questions:**

- i. How gene sequencing is important for us?
- ii. Why Restriction enzymes are called molecular scissors?
- iii. Why genetic counseling is important?

**CHAPTER NO. 10 (Evolution)**

- i. What is Hardy Weinberg principle? Describe it briefly.
- ii. Differentiate between Theory of Special Creating and Theory of Organic Evolution.
- iii. Explain evidences in support of organic evolution.

**Reasoning questions:**

- i. How the species become extinct? Give reason/s.
- ii. How recombinant technology opened the door of evolution?
- iii. In human beings ear muscles are greatly reduced and non functional. Why?
- iv. How do homologous organs provide evidence in support of evolution?
- v. How do embryological studies provide evidence for evolution?

**CHAPTER NO. 13 (Man and His Environment)**

**Non reasoning questions:**

- i. What are the advantages and disadvantages of nuclear energy?
- ii. Write a short note on Acid rain, Greenhouse effect and Depletion of Ozone layer.
- iii. What is eutrophication?
- iv. Differentiate between:
  - a) *Deforestation & Afforestation*
  - b) *Martial pollution & Non-material pollution*
  - c) *Renewable & Non-renewable resources*

**Reasoning questions:**

- i. How algal bloom is harmful for life? Give reason.
- ii. Why industrial effluents are injurious for health?
- iii. How water is important for life?
- iv. Soil is the most important renewable natural resource, why?
- v. How human are responsible for air and soil pollution?
- vi. What are the reasons of global warming?

### **Important Questions for Section ‘C’**

**CHAPTER NO. 1 (Homeostasis)**

- Q.1. Write a detail note on Kidney disorders OR Function of Liver.
- Q.2. Describe the human excretory system in detail

**CHAPTER NO. 2 (Support and Movement)**

- Q.1. How does locomotion is taken place in protozoan Protists and animals?
- Q.2. Describe the various types of skeletons found in animals. Discuss human skeleton.

**CHAPTER NO. 3 (Co-Ordination & Control)**

- Q.1. Explain the mechanism of development and transmission of nerve impulse with label diagram.
- Q.2. What is innate or learning behavior? Discuss its different categories with examples.
- Q.3. Write a detail note on mammalian endocrine system with reference to man.

**CHAPTER NO. 4 (Reproduction)**

Q.1. What is menstrual cycle? Discuss its various phases and the events taking place in each phase.

**CHAPTER NO. 5 (Growth & Development)**

Q.1. What is gastrulation? Explain the formation of three germ layers in chick embryo.

**CHAPTER NO. 10 (Evolution)**

Q.1. Describe Darwin OR Lamarck theory of evolution briefly?

**CHAPTER NO. 13 (Man and His Environment)**

Q.1. Describe Renewable energy resources including hydroelectric power, biogas energy and

Oceanic thermal gradient and non renewable energy resources (nuclear energy and fossils fuel energy)

Q.2. Describe various types of pollution in detail?

**Remember me in prayers. GOod luck for the exams**

**Notes by:-**

**Adamjee Coaching Center**

**Made Downloadable by:-**

**Saifee Alii**

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